

## **22.1 Purpose and Need**

No references.

## **22.2 Proposed Action and Alternatives**

No references.

## **22.3 Transportation**

### **22.3.1 Rail Operations and Rail Safety**

Anderson, R. T. and C. P. L. Barkan. 2004. *Railroad Accident Rates for Use in Rail Transportation Risk Analysis*. Transportation Research Record: Journal of the Transportation Research Board. 1863: 88–98.

Liu, X., C. P. L. Barkan, and M. R. Saat. 2011. Analysis of Derailments by Accident Cause: Evaluating Railroad Track Upgrades to Reduce Transportation Risk. *Transportation Research Record: Journal of the Transportation Research Board*. 2261: 178–185.

Federal Railroad Administration. 2013. Data analyses. January 2010 through December 2013. Available: <http://safetydata.fra.dot.gov>.

### **22.3.2 Grade-Crossing Delay**

Big Horn County. 2009a. *Ambulance*. Available: <http://bighorn.mt.gov/ambulance.htm>. Accessed: May 12, 2014.

Big Horn County. 2009b. *Rural Fire*. Available: [http://bighorn.mt.gov/rural\\_fire.htm](http://bighorn.mt.gov/rural_fire.htm). Accessed: May 12, 2014.

City of Forsyth. 2009. *Forsyth Fire Department*. Available: [http://forsythmt.com/watts\\_fire.html](http://forsythmt.com/watts_fire.html). Accessed: May 12, 2014.

City of Sheridan, Wyoming. 2014. *Fire Rescue Department*. Available: <http://www.sheridanwy.net/departments/fire-rescue>. Accessed: May 12, 2014.

Colstrip Medical Center. 2013. *Services*. Available: <http://www.colstripclinic.com/>. Accessed: May 12, 2014.

- Colstrip Volunteer Fire Department. 2014. *About*. Available: <http://cityofcolstrip.com/index.php/contact/fire-department>. Accessed: May 12, 2014.
- Federal Highway Administration. 2012. *Flexibility in Highway Design*. Chapter 3: Functional Classification. Available: <http://www.fhwa.dot.gov/environment/publications/flexibility/ch03.cfm>. Accessed: May 30, 2014.
- Federal Railroad Administration. 2013. *Highway-Rail Crossing Inventory Data*. Available: <http://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Downloaddbf.aspx>. Accessed: May 17, 2013.
- Holy Rosary Healthcare. 2014. *About Us*. Available: <http://www.holyrosaryhealthcare.org/>. Accessed: May 12, 2014.
- Indian Health Service. 2013. *Northern Cheyenne Service Unit*. Available: [http://www.ihs.gov/billings/index.cfm?module=bao\\_su\\_n\\_cheyenne](http://www.ihs.gov/billings/index.cfm?module=bao_su_n_cheyenne). Accessed: May 12, 2014.
- Miles City Fire Rescue. 2013. *Fire Apparatus & Vehicles*. Available: <http://milescityfirerescue.org/>. Accessed: May 12, 2014.
- Montana Department of Transportation. 2014. *Traffic Data*. Available: <http://www.mdt.mt.gov/publications/datastats/traffic.shtml>. Accessed: March 5, 2014.
- Rosebud Health Care Center. 2013. *Hospital/Services*. Available: <http://rosebudhealthcare.com/>. Accessed: May 12, 2014.
- South Sheridan Medical Center. 2007. *Urgent Care*. Available: <http://www.southsheridanmedicalcenter.com/>. Accessed: May 12, 2014.
- Transportation Research Board. 2010. *Highway Capacity Manual*. Available: [http://www.co.monterey.ca.us/planning/major/Pebble%20Beach%20Company/Pebble\\_Beach\\_DEIR\\_Nov\\_2011/Pebble\\_Beach\\_DEIR\\_Admin\\_Records\\_Nov\\_2011/TRB/TRB\\_2000HghwyCapMan\\_IntersectionLOSCriteria.pdf](http://www.co.monterey.ca.us/planning/major/Pebble%20Beach%20Company/Pebble_Beach_DEIR_Nov_2011/Pebble_Beach_DEIR_Admin_Records_Nov_2011/TRB/TRB_2000HghwyCapMan_IntersectionLOSCriteria.pdf). Accessed: March 5, 2014.
- U.S. Energy Information Administration. 2014. *Annual Energy Outlook*. Table A7. Transportation Sector Key Indicators and Delivered Energy Consumption. Available: <http://www.eia.gov/forecasts/aeo/er/pdf/tbla7.pdf>. Accessed: March 5, 2014.

### **22.3.2.1 Personal Communications**

- Reid, Ryan. Fire Chief. Colstrip Volunteer Fire Department, Colstrip, Montana. May 22, 2014—Phone call.

### 22.3.3 Grade-Crossing Safety

- Federal Highway Administration. 2007. *Railroad-Highway Grade Crossing Handbook*. Revised Second Edition - 2007. Section 4: Identification of Alternatives. (FHWA-SA-07-010.) Washington, D.C. Available: [http://safety.fhwa.dot.gov/xings/com\\_roaduser/07010/](http://safety.fhwa.dot.gov/xings/com_roaduser/07010/). Accessed: March 26, 2014.
- Federal Railroad Administration. 1987. *Rail-Highway Crossing Resource Allocation Procedure User's Guide*. Third Edition. Available: <http://www.fra.dot.gov/eLib/Details/L02900>. Accessed: March 21, 2014.
- Federal Railroad Administration. 2013. *Highway-Rail Crossing Inventory Data*. Available: <http://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Downloaddbf.aspx>. Accessed: May 17, 2014.
- Federal Railroad Administration. 2014a. *GradeDec.Net Model*. Available: <http://gradedec.fra.dot.gov/default.aspx>. Accessed: May 17, 2014.
- Federal Railroad Administration. 2014b. *Web Accident Prediction System*. Colstrip Subdivision. Available: <http://safetydata.fra.dot.gov/webaps/default.aspx>. Accessed: April 30, 2014.
- Montana Department of Transportation. 2014. *Traffic Data*. Available: <http://www.mdt.mt.gov/publications/datastats/traffic.shtml>. Accessed: March 5, 2014.
- U.S. Energy Information Administration. 2014. *Annual Energy Outlook 2014*. Table A7. Transportation Sector Key Indicators and Delivered Energy Consumption. Available: <http://www.eia.gov/forecasts/aeo/er/pdf/tbla7.pdf>. Accessed: March 5, 2014.

### 22.3.4 Navigation

- Montana Department of State Lands. 1997. *Navigable Waterways Owned by the State of Montana and Administered by the Department of State Lands*. September 2. Helena, MT. Available: [http://www.archive.org/stream/navigablewaterwa00montrich/navigablewaterwa00montrich\\_djvu.txt](http://www.archive.org/stream/navigablewaterwa00montrich/navigablewaterwa00montrich_djvu.txt). Accessed: March 3, 2014
- U.S. Coast Guard. 2013. *Navigability Determinations for the Thirteenth U.S. Coast Guard District*. U.S. Department of Homeland Security, Washington, DC. Last Modified: July 2, 2013. Available: <http://www.uscg.mil/d13/docs/> and [http://www.uscg.mil/d13/docs/exhibit11\\_k1.pdf](http://www.uscg.mil/d13/docs/exhibit11_k1.pdf). Accessed: March 4, 2014.

### 22.3.5 Applicable Regulations

- U.S. Coast Guard. 2013. *Navigability Determinations for the Thirteenth U.S. Coast Guard District*. Washington DC. Last Modified July 2, 2013. Available:

<http://www.uscg.mil/d13/docs/> and [http://www.uscg.mil/d13/docs/exhibit11\\_k1.pdf](http://www.uscg.mil/d13/docs/exhibit11_k1.pdf).  
Accessed: March 4, 2014.

## 22.4 Air Quality

- American Petroleum Institute. 2012. *Review and Evaluation of the Plume Volume Molar Ratio Method (PVMRM) and Ozone Limiting Method (OLM) for short-term (1-hour average) NO<sub>2</sub> Impacts*. Prepared by S. Hanna, B. Egan, E. Hendrick, and V. Tino. July 18.
- Brode, R. W. 2014. *AERMOD Modeling System Update: Plans/Priorities for Appendix W Updates*. U.S. Environmental Protection Agency. Presented at 2014 EPA R/S/L Modelers' Workshop. Salt Lake City, UT. May 20.
- Bureau of Land Management. 2013. *Miles City Field Office Draft Resource Management Plan and Environmental Impact Statement*. Miles City, MT. February. Available: [http://www.blm.gov/mt/st/en/fo/miles\\_city\\_field\\_office/rmp.html](http://www.blm.gov/mt/st/en/fo/miles_city_field_office/rmp.html). Accessed: May 7, 2013.
- Calvin, E. M., G. D. Emmitt, and J. E. Williams. 1993. *A Rail Emission Study: Fugitive Coal Dust Assessment and Mitigation*. Prepared by Simpson Weather Associates for Norfolk Southern Corporation. Charlottesville, VA. Available: <http://www.powerpastcoal.org/wp-content/uploads/2011/08/A-RAIL-EMISSION-STUDY-FUGITIVE-COAL-DUST-ASSESSMENT-AND-MITIGATION.pdf>. Accessed: September 21, 2012.
- Canadian Council of Ministers of the Environment. 2001. *A Study of Fugitive Coal Dust Emissions in Canada*. November. Available: <http://www.powerpastcoal.org/wp-content/uploads/2011/08/Fugitive-Coal-Dust-Emissions-in-Canada-2001.pdf>. Accessed: April 5, 2013.
- Colorado State University. 2014. *Cooperative Institute for Research in the Atmosphere. Visibility Summary – IMPROVE Aerosol*. Available: <http://views.cira.colostate.edu/fed/AqSummary/VisSummary.aspx?siidse=1>. Accessed: May 30, 2014.
- Federal Land Managers' Air Quality Related Values Work Group (FLAG). 2010. *Phase I Report—Revised. Natural Resource Report NPS/NRPC/NRR—2010/232*. Available: [http://nature.nps.gov/air/Pubs/pdf/flag/FLAG\\_2010.pdf](http://nature.nps.gov/air/Pubs/pdf/flag/FLAG_2010.pdf). Accessed: April 2, 2014.
- Fox, D. G., A. M. Bartuska, J. G. Byrne, E. Cowling, R. Fisher, G. E. Likens, S. E. Lindberg, R. A. Linthurst, J. Messer, and P. S. Nichols. 1989. *A Screening Procedure to Evaluate Pollution Effects on Class I Wilderness Areas. General Technical Report RM-168*. U.S. Department of Agriculture, Forest Service Rocky Mountain Forest and Range

- Experiment Station, Fort Collins, CO. Available:  
[http://www.fs.fed.us/rm/pubs\\_rm/rm\\_gtr168.pdf](http://www.fs.fed.us/rm/pubs_rm/rm_gtr168.pdf). Accessed: May 5, 2014.
- Golder and Associates. 2011. Comparison of Ambient Ratio Method and Ozone Limiting Method for Predicting NO<sub>2</sub>. Jain, R., K. Önder, and G. Hoeksema. Presented at the 2011 AWMA annual meeting.
- Haines, P., S. Templeman, M. H., Chatten Cowherd, Jr., and M. Grelinger. 2001. *Effects of Prescribed Grass Fire on Wind Erosion Rates from Surface Soil at Rocky Flats, Colorado*. Prepared for U.S. Environmental Protection Agency. May 2. Available:  
<http://www.epa.gov/ttn/chief/conference/ei10/fugdust/haines.pdf>. Accessed: May 15, 2014.
- Montana Department of Environmental Quality. 2001a. *Air Quality Permit #1570-06, Western Energy Company, Colstrip, Montana, July 19, 2001 AFS #: 087-0004*. Available: [www.deq.mt.gov/AirQuality/ARMpermits/1570-06.pdf](http://www.deq.mt.gov/AirQuality/ARMpermits/1570-06.pdf). Accessed: March 28, 2014.
- Montana Department of Environmental Quality. 2001b. *Air Quality Permit #1483-08, Western Energy Company, Colstrip, Montana, October 23, 2001 AFS #: 087-0004*. Available: [www.deq.mt.gov/AirQuality/ARMpermits/1483-08.pdf](http://www.deq.mt.gov/AirQuality/ARMpermits/1483-08.pdf). Accessed: August 25, 2014.
- Montana Department of Environmental Quality. 2009. *Air Quality Permit #1120-09, Spring Creek Coal, Decker, Montana*. March 18, 2000. Attachment 1 Air Quality Monitoring. Available: [www.deq.mt.gov/AirQuality/ARMpermits/1120-10.pdf](http://www.deq.mt.gov/AirQuality/ARMpermits/1120-10.pdf). Accessed: March 28, 2014.
- Montana Department of Environmental Quality. 2012a. *Air Quality Permit #1120-11, Spring Creek Coal, Decker, Montana*. October 2, 2012, Section D, Current Permit Action. Permitting and Compliance Division. Available:  
[www.deq.mt.gov/AirQuality/ARMpermits/1120-11.pdf](http://www.deq.mt.gov/AirQuality/ARMpermits/1120-11.pdf). Accessed: March 28, 2014.
- Montana Department of Environmental Quality. 2012b. *Air Quality Permit #1435-07, Decker Coal Company, Decker, Montana*. July 27, 2012. Attachment 1, Ambient Air Monitoring Plan, MAQP #1435-07. Permitting and Compliance Division. Available:  
[www.deq.mt.gov/AirQuality/ARMpermits/1435-07.pdf](http://www.deq.mt.gov/AirQuality/ARMpermits/1435-07.pdf). Accessed: March 28, 2014.
- Montana Department of Environmental Quality. 2012c. *State of Montana Air Quality Monitoring Network Plan*. Available:  
[deq.mt.gov/AirQuality/AQInfo/PDF/2012\\_NETWORK\\_PLAN.pdf](http://deq.mt.gov/AirQuality/AQInfo/PDF/2012_NETWORK_PLAN.pdf). Accessed: March 26, 2013.
- Montana Department of Environmental Quality. 2012d. Memorandum from Vickie Walsh (MDEQ) to Susan Bassett (BLM) dated July 12, 2012.

- Montana Department of Environmental Quality. 2012e. Email from Cyra Cain (MDEQ) to Susan Bassett (BLM) dated August 3, 2012.
- Montana Department of Environmental Quality. 2013. *Preliminary Determination on Permit Application Number 1570-07*, Western Energy Company Surface Coal Mine and Extraction Facility July 22, 2013. Section V Air Quality Impact Analysis, Page 11. Available: [http://www.deq.mt.gov/AirQuality/ARMpermits/1570-07\\_PD.pdf](http://www.deq.mt.gov/AirQuality/ARMpermits/1570-07_PD.pdf). Accessed: March 28, 2014.
- Montana Department of Military Affairs, Disaster and Emergency Services. 2013. *Preliminary Final Version of the 2013 Update for the State of Montana Multi-Hazard Mitigation Plan and Statewide Hazard Assessment*. Prepared by Tetra Tech. November. Available: <http://letsmitigatemontana.com/draft-pdm-plan/>. Accessed: March 26, 2014.
- Montana Department of Natural Resources and Conservation. 2012. 2011 *DNRC Fire Statistics*. DNRC Forestry Division. April 23. Available: <http://dnrc.mt.gov/Forestry/Fire/Statistics/2011statistics.asp#10yrincidents>. Accessed: March 26, 2014.
- New South Wales Department of Environment and Conservation. 2005. *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*. Australia.
- New South Wales EDO (formerly Environmental Defenders' Office). 2012. *Fact Sheet 4.7 Air Quality – Dust Monitoring*. Available: [http://www.edo.org.au/edonsw/site/factsh/fs04\\_7.php](http://www.edo.org.au/edonsw/site/factsh/fs04_7.php). Accessed: November 1, 2012.
- New South Wales Ministry of Health. 2007. *Mine Dust and You*. Fact sheet developed with the NSW Minerals Council. Available: <http://www.health.nsw.gov.au/environment/factsheets/Pages/mine-dust.aspx>. Accessed: May 3, 2014.
- Norfolk Southern Corporation. 2014. *2013 Annual Report to the Joint Subcommittee Studying Measures to Reduce Emissions from Coal-Carrying Railroad Cars per Senate Resolution No. 257*. Atlanta, GA. February. Available: [http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/RD962014/\\$file/RD96.pdf](http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/RD962014/$file/RD96.pdf). Accessed: June 2, 2014.
- Owen, C. 2014. *NO<sub>2</sub> Modeling: Current Status and Plans for Updates to Appendix W*. U.S. Environmental Protection Agency. Presented at 2014 EPA R/S/L Modelers' Workshop. Salt Lake City, UT. May 20.
- Queensland Rail Ltd. (now Aurizon). 2008. *Final Report, Environmental Evaluation of Fugitive Coal Dust Emissions from Coal Trains Goonyella, Blackwater, and Moura Coal Rail Systems*. Prepared by Connell Hatch Ltd. (now Aurecon Hatch). Report number H327578-N00-EE00.00. 31 March. Available: [http://www.aurizon.com.au/InfrastructureProjects/Rail%20Network/Coal\\_Loss\\_Management\\_Project\\_Environmental\\_Evaluation.pdf](http://www.aurizon.com.au/InfrastructureProjects/Rail%20Network/Coal_Loss_Management_Project_Environmental_Evaluation.pdf).

- RTP Environmental Associates Inc. 2013. *Ambient Ratio Method Version 2 (ARM2) for AERMOD 1-hr NO<sub>2</sub> NAAQS Analyses*. April. Presented at the USEPA Region V, Regional, State and Local Modelers Workshop. Dallas, TX.
- Standards New Zealand. 2003. *Australian/New Zealand Standard, Methods for Sampling and Analysis of Ambient Air, Method 10.1: Determination of Particulate Matter – Deposited Matter – Gravimetric Method*. Available: [http://shop.standards.co.nz/catalog/3580.10.1%3A2003\(AS%7CNZS\)/view](http://shop.standards.co.nz/catalog/3580.10.1%3A2003(AS%7CNZS)/view). Accessed: June 5, 2014.
- Surface Transportation Board. 2004. *Draft Supplemental Environmental Impact Statement, STB Finance Docket No. 30186 (Sub–No. 3), Tongue River Railroad Company, Inc. – Construction and Operation – Western Alignment, Tongue River III - Rosebud and Big Horn Counties, Montana*. Available: <http://www.stb.dot.gov/decisions/readingroom.nsf/51d7c65c6f78e79385256541007f0580/e0471b55d3fd433685256f2d0058c818?OpenDocument>. Accessed: October 2, 2012.
- U.S. Department of Agriculture. 2014. *Web Soil Survey*. Natural Resources Conservation Service, Soil Survey Staff. Available: <http://websoilsurvey.nrcs.usda.gov/>. Accessed: January 15, 2014.
- U.S. Energy Information Administration. 2014. *Historical Detailed Coal Production Data (1983-2012)*. Available: <http://www.eia.gov/coal/data.cfm#production>. Accessed: August 26, 2014.
- U.S. Environmental Protection Agency. 1997. *Regulatory Announcement: Federal Preemption of State and Local Control of Locomotives*. EPA420-F-97-050. December. Available: <http://www.epa.gov/otaq/regs/nonroad/locomotv/frm/42097050.pdf>. Accessed: January 23, 2015.
- U.S. Environmental Protection Agency. 1998a. *Compilation of Air Pollutant Emission Factors*. AP-42. July. Table 11.9-4. Available: <http://www.epa.gov/ttnchie1/ap42/ch11/final/c11s09.pdf>. Accessed: February 27, 2014.
- U.S. Environmental Protection Agency. 1998b. *Revision of Emission Factors for AP-42 Section 11.9, Western Surface Coal Mining*. Revised Final Report. Available: <http://www.epa.gov/ttn/chie/ap42/ch11/bgdocs/b11s09.pdf>. Accessed: February 27, 2014.
- U.S. Environmental Protection Agency. 2004. *User's Guide for the AMS/EPA Regulatory Model – AERMOD*. Office of Air Quality Planning and Standards. EPA-454/B-03-001. September. Available: [http://www.epa.gov/ttn/scram/models/aermod/aermod\\_userguide.zip](http://www.epa.gov/ttn/scram/models/aermod/aermod_userguide.zip). Accessed: April 2, 2014.

- U.S. Environmental Protection Agency. 2006. *Compilation of Air Pollutant Emission Factors*. AP-42. Sec. 13.2 background document, Table 1. Available: <http://www.epa.gov/ttn/chief/ap42/ch13/index.html>. Accessed: February 19, 2014.
- U.S. Environmental Protection Agency. 2008. *Regulatory Impact Analysis of the Proposed Revisions to the National Ambient Air Quality Standards for Lead*. Office of Air Quality Planning and Standards, Health and Environmental Impact Division, Air-Benefit Cost Group. Research Triangle Park. October. Available: <http://www.epa.gov/ttnecas1/regdata/RIAs/finalpbria.pdf>. Accessed: May 5, 2014.
- U.S. Environmental Protection Agency. 2009a. *NONROAD 2008a Emission Inventory Model*. Office of Transportation and Air Quality. July. Available: <http://epa.gov/otaq/nonrdmdl.htm>. Accessed: February 28, 2014.
- U.S. Environmental Protection Agency. 2009b. *Emission Factors for Locomotives*. EPA-420-F-09-025. Office of Transportation and Air Quality. April. Available: <http://www.epa.gov/otaq/regs/nonroad/locomotv/420f09025.pdf>. Accessed: June 19, 2013.
- U.S. Environmental Protection Agency. 2010. *MOVES (Motor Vehicle Emission Simulator) 2010b Model*. Office of Transportation and Air Quality. Available: <http://www.epa.gov/otaq/models/moves/>. Accessed: May 29, 2014.
- U.S. Environmental Protection Agency. 2013. *2011 National Emissions Inventory*. Sector Summaries. September 30. <http://www.epa.gov/ttn/chief/net/2011inventory.html>. Accessed: March 28, 2014.
- U.S. Environmental Protection Agency. 2014a. *AirData. Birney-Tongue River, Montana, Air Quality Monitoring Site (ID # 30-087-0001): Years 2010-2013*. Available: <http://www.epa.gov/airquality/airdata/>. Accessed: February 6, 2014.
- U.S. Environmental Protection Agency. 2014b. *CASTNET Download Data: Total Deposition - Annual*. Available: <http://java.epa.gov/castnet/reportPage.do>. Accessed: May 30, 2014.
- U.S. Forest Service. 2000. *Rocky Mountain Region. Screening Methodology for Calculating ANC Change to High Elevation Lakes*. December 2000. Available: [http://www.fs.fed.us/air/documents/anc\\_scre.pdf](http://www.fs.fed.us/air/documents/anc_scre.pdf). Accessed: May 5, 2014.
- Western Region Air Partnership. 2006. *WRAP Fugitive Dust Handbook*. Western Governors' Association. Denver, CO. September 7. Available: [http://ulpeis.anl.gov/documents/dpeis/references/pdfs/Countess\\_Environmental\\_2006\\_WRAP\\_Fugitive.pdf](http://ulpeis.anl.gov/documents/dpeis/references/pdfs/Countess_Environmental_2006_WRAP_Fugitive.pdf). Accessed: November 9, 2012.
- Western Region Climate Center. 2014a. *Period of Record Monthly Climate Summary*. Available: <http://www.wrcc.dri.edu/summary/emt.html>. Accessed: March 24, 2014.



Western Region Climate Center. 2014b. *Climatological Summary, Miles City-Frank Wiley Field Airport (KMLS), MT*. Available: <http://www.wrcc.dri.edu/summary/mls.mt.html>. Accessed: March 24, 2014.

Witt, P., K. Carey and T. Nguyen. 1999. *Prediction of Dust Loss from Conveyors Using CFD Modeling*. Second International Conference on CFD in the Minerals and Process Industries, CSIRO, Melbourne. Available: [http://www.cfd.com.au/cfd\\_conf99/papers/062WITT.PDF](http://www.cfd.com.au/cfd_conf99/papers/062WITT.PDF).

## 22.4.1 Personal Communications

Fritz, Steven. Manager, Design and Development Department. Southwest Research Institute, San Antonio, TX. March 24, 2014—Telephone conversation.

# 22.5 Greenhouse Gases and Climate Change

## 22.5.1 Greenhouse Gases

American Association of State Highway and Transportation Officials. 2010. *Greenhouse Gas Mitigation Measures for Transportation Construction, Maintenance, and Operations Activities*. Prepared by ICF International as part of National Cooperative Highway Research Program (NCHRP) Project 25-25. Available: [http://onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP25-25\(58\)\\_FR.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP25-25(58)_FR.pdf). Accessed January 18, 2015.

Association of American Railroads. 2014. *Freight Railroads Help Reduce Greenhouse Gas Emissions*. Policy and Economics Department. Available: <https://www.aar.org/BackgroundPapers/Railroads%20and%20Greenhouse%20Gas%20Emissions.pdf>. Accessed: January 18, 2015.

Council on Environmental Quality. 1981. *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*. 46 Fed. Reg. 18026 (March 23, 1981). Available: <http://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>.

Council on Environmental Quality. 2014. *Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*. Available: <https://federalregister.gov/a/2014-30035>. Accessed: January 17, 2015.

Dones, R., X. Zhou, and C. Tian. 2004. Life Cycle Assessment (LCA) of Chinese Energy Chains for Shandong Electricity Scenarios. *International Journal of Global Energy Issues* 22(2–4):199–224.

Dones, R., C. Bauer, and A. Roder. 2007. *Kohle. Ecoinvent report No. 6-VI. Paul Scherrer Institut Villigen*. December. Swiss Centre for Life Cycle Inventories.

- DynCorp EENSP, Inc. 1995. *Assessment of the Environmental Benefits of Renewables Deployment: A Total Fuel Cycle Analysis of the Greenhouse Gas Impacts of Renewable Generation*. Golden, CO: National Renewable Energy Laboratory.
- Ecoinvent Centre. 2007. *Ecoinvent Data v2.0. Ecoinvent Reports No. 1-25*. Dübendorf, Switzerland: Swiss Centre for Life Cycle Inventories.
- Federal Highway Administration. 2009. Policies to Reduce Greenhouse Gas Emissions Associated with Freight Movements. Proceedings from *Innovations for Tomorrow's Transportation*, Issue 1. U.S. Department of Transportation. Retrieved January 16, 2015, from <http://www.fhwa.dot.gov/policy/otps/innovation/issue1/policies.htm>. Accessed: January 16, 2015.
- Federal Railroad Administration. 2009. *Comparative Evaluation of Rail and Truck Fuel Efficiency on Competitive Corridors*. U.S. Department of Transportation, prepared by ICF International. Washington, D.C.
- Federal Railroad Administration. 2014. *Best Practices and Strategies for Improving Rail Energy Efficiency*. U.S. Department of Transportation. Washington, D.C. Available: <http://trid.trb.org/view.aspx?id=1290855>. Accessed: January 16, 2015.
- Franklin Associates. 2010. Appendix A: Energy Requirements and Environmental Emissions for Fuel Consumption, in: *Cradle-to-Gate Life Cycle Inventory of Nine Plastic Resins and Four Polyurethane Precursors*. July. Prepared for the Plastics Division of the American Chemistry Council by Franklin Associate. Prairie Village, KS.
- Hill, N., C. Brannigan, D. Wynn, R. Milnes, H. van Essen, E. den Boer, A. van Grinsven, T. Ligthart, and R. van Gijlswijk. 2012. *EU Transport GHG: Routes to 2050 II. Final Report Appendix 2: The Role of GHG Emissions from Infrastructure Construction, vehicle manufacturing, and ELVs in overall transport sector emissions*. April 30. Available: <http://www.eutransportghg2050.eu/cms/assets/Uploads/Reports/EU-Transport-GHG-2050-II-Task-2-FINAL-30Apr12.pdf>. Accessed: July 15, 2014.
- Hondo, H. 2005. Life Cycle GHG Emission Analysis Of Power Generation Systems: Japanese case. *Energy* 30(11–12):2042–2056.
- Intergovernmental Panel on Climate Change. 2007. *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (Eds.)]. Cambridge, United Kingdom, and New York, NY: Cambridge University Press.
- Intergovernmental Panel on Climate Change. 2014. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. (Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, and L.L. White, Eds.).

- Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.  
Available: [//ipcc-wg2.gov/AR5/report/](http://ipcc-wg2.gov/AR5/report/). Accessed: May 31, 2014.
- Martin, J.A. 1997. A Total Fuel Cycle Approach to Reducing Greenhouse Gas Emissions: Solar Generation Technologies As Greenhouse Gas Offsets in U.S. Utility Systems. *Solar Energy (Selected Proceeding of ISES 1995: Solar World Congress, Part IV)* 59(4–6):195–203.
- May, J.R. and D.J. Brennan. 2003. Life Cycle Assessment of Australian Fossil Energy Options. *Process Safety and Environmental Protection: Transactions of the Institution of Chemical Engineers, Part B* 81(5):317–330.
- Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds. 2014. *Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program. 841 pp. doi:10.7930/J0Z31WJ2.
- Mine Safety and Health Administration. 2013. *Part 50 Data*. Mining Industry Accident, Injuries, Employment, and Production Data. Available: <http://www.msha.gov/STATS/PART50/p50y2k/p50y2k.HTM>. Accessed:
- Montana Department of Environmental Quality. 2001. *Air Quality Permit #1570-06*. Issued to Western Energy Company. July 19. Available: <http://www.deq.mt.gov/AirQuality/ARMpermits/1570-06.pdf>. Accessed: July 15, 2014.
- National Energy Technology Laboratory. 2010. *Life Cycle Analysis: Existing Pulverized Coal (EXPC) Power Plant*. Available: <https://www.netl.doe.gov/energy-analyses/refshelf/>. Accessed: January 2011.
- Oak Ridge National Library. 2014. *Transportation Energy Data Book Edition 33*. Davis, S. D., Diegel, S.W., Boundy, R. G., (Eds.). Oak Ridge National Laboratory, Oak Ridge, TN.
- Spath, P.L., M.K. Mann, and D.R. Kerr. 1999. *Life Cycle Assessment of Coal-fired Power Production*. Golden, CO: National Renewable Energy Laboratory, U.S. Department of Energy.
- U.S. Department of State. 2010. Letter to Mr. Yvo de Boer, Executive Secretary United Nations Framework Convention on Climate Change to submit the United States' emissions reduction target under the Copenhagen Accord. January 28, 2010, Washington, D.C. Available: [https://unfccc.int/files/meetings/cop\\_15/copenhagen\\_accord/application/pdf/unitedstatescphaccord\\_app.1.pdf](https://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/unitedstatescphaccord_app.1.pdf). Accessed: January 17, 2015.
- U.S. Energy Information Administration. 2014. *International Energy Statistics*. Available: <http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=1&pid=7&aid=1&cid=CH,&syid=1980&eyid=2012&unit=TST>. Accessed: July 15, 2014.

- U.S. Environmental Protection Agency. 2007. *Cleaner Diesels: Low Cost Ways to Reduce Emissions from Construction Equipment*. Prepared by ICF International for the National Center for Environmental Innovation, U.S. Environmental Protection Agency. Washington, D.C. Available: <http://www.epa.gov/cleandiesel/documents/100r07002.pdf>. Accessed: January 18, 2015.
- U.S. Environmental Protection Agency. 2008. *NONROAD Emissions Model User's Guide*. December. EPA420-R-05-013. Office of Transportation and Air Quality. Available: <http://www.epa.gov/otaq/models/nonrdmdl/nonrdmdl2005/420r05013.pdf>. Accessed: July 15, 2014.
- U.S. Environmental Protection Agency. 2010. *Motor Vehicle Emission Simulator (MOVES) 2010 User Guide*. EPA-420-B-09-041. Office of Transportation and Air Quality. Available: <http://pbadupws.nrc.gov/docs/ML1201/ML120120380.pdf>. Accessed: July 15, 2014.
- U.S. Environmental Protection Agency. 2012. *Global Non-CO<sub>2</sub> GHG Emissions: 1990–2030*. Available: <http://www.epa.gov/climatechange/EPAactivities/economics/nonco2projections.html>. Accessed: July 15, 2014.
- U.S. Environmental Protection Agency. 2013. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2011 – Annex 3: Methodological Descriptions for Additional Source or Sink Categories*. EPA 430-R-13-001.
- U.S. Environmental Protection Agency. 2014a. *Emissions & Generation Integrated Database (eGRID)*. Ninth Edition with year 2010 data (eGRID2010 Version 1.0).
- U.S. Environmental Protection Agency. 2014b. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2012*. EPA 430-R-14-003. Washington, D.C.
- U.S. Environmental Protection Agency. 2014c. Overview of Greenhouse Gases: Emissions of Fluorinated Gases. Available: <http://www.epa.gov/climatechange/ghgemissions/gases/fgases.html>. Accessed: January 16, 2015.
- U.S. Geological Survey. 2009. *Emissions from Coal Fires and Their Impact on the Environment*. September. Fact Sheet 2009-3084. U.S. Department of the Interior. Available: <http://pubs.usgs.gov/fs/2009/3084/pdf/fs2009-3084.pdf>. Accessed: September 25, 2014.
- U.S. Global Change Research Program. 2009. *Global Climate Change Impacts in the United States*. United States Global Change Research Program. Washington, D.C.
- Vyas, A. D., D.M. Patel, and K.M. Bertram. 2013. *Potential for Energy Efficiency Improvement Beyond the Light-Duty-Vehicle Sector*. Transportation Energy Futures

Series. Prepared for the U.S. Department of Energy by Argonne National Laboratory, Argonne, IL. DOE/GO-102013-3706.

Westshore Terminals. 2013. *Environmental Impact Assessment for the Terminal Infrastructure Reinvestment Project*. Prepared by SNC-Lavalin Environment & Water. November 13, 2013. Available: <http://www.portmetrovanancouver.com/docs/default-source/PROJECTS-Westshore/here.pdf?sfvrsn=0>. Accessed: January 16, 2015.

Whitaker, M., G.A. Heath, P. O'Donoghue, and M. Vorum. 2012. Life Cycle Greenhouse Gas Emissions of Coal-Fired Electricity Generation: Systematic Review and Harmonization. *Journal of Industrial Ecology* 16(S1):S53–S72.

World Resources Institute. 2014. *Climate Analysis Indicators Tool (CAIT) 2.0*. WRI's Climate Data Explorer. Accessed: September 23, 2014.

## 22.5.2 Climate Change

Doherty, K.E., D.E. Neugle, B.L. Walker, and J.M. Graham. 2008. Greater Sage-Grouse Winter Habitat Selection and Energy Development. *Journal of Wildlife Development* 72: 187–195. doi: 10.2193/2006-454.

Federal Railroad Administration. 2014. *Continuous Welded Rail (CWR)*. Available: <https://www.fra.dot.gov/Page/P0123>. Accessed: May 29, 2014.

FireSafe Montana. 2009. *Living with Fire: Homeowners' Firesafe Guide for Montana*. Available: <http://firesafemt.townsquareinteractive.com/files/2012/05/Living-w-Fire-FSM-2009-1.pdf>. Accessed: April 1, 2014.

Groffman, P.M., P. Kareiva, S. Carter, N.B. Grimm, J. Lawler, M. Mack, V. Matzek, and H. Tallis. 2014. Ch. 8: Ecosystems, Biodiversity, and Ecosystem Services. *Climate Change Impacts in the United States: The Third National Climate Assessment*. J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research Program, 195–219. doi:10.7930/J0TD9V7H.

Hydro Solutions, Inc. 2011. *Tongue River Hydrologic Summary Report*, Tongue River Information Program. September 2011. Billings, MT.

ICF International. 2013. *A Vulnerability and Risk Assessment of SEPTA's Regional Rail: A Transit Climate Change Adaptation Assessment Pilot*. May 2013. Produced by ICF International (ICF) for the U.S. Department of Transportation Federal Transit Administration.

Intergovernmental Panel on Climate Change. 1996. *Climate Change 1995: Impacts, Adaptations and Mitigation of Climate Change: Scientific-Technical Analyses, Contribution of Working Group II to the Second Assessment Report of the Intergovernmental Panel on Climate Change*. Watson, R.T.; Zinyowera, M.C.; and Moss, R.H., ed. Cambridge University Press, ISBN 0-521-56431-X (pb: 0-521-56437-9).

- Intergovernmental Panel on Climate Change. 2000. *Special Report on Emission Scenarios (SRES)*. Intergovernmental Panel on Climate Change (IPCC). Available: <http://www.ipcc.ch/pdf/special-reports/spm/sres-en.pdf>. Accessed: May 28, 2014.
- Intergovernmental Panel on Climate Change. 2007. *Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Parry, M.L.; Canziani, O.F.; Palutikof, J.P.; van der Linden, P.J.; and Hanson, C.E., ed. Cambridge University Press, ISBN 978-0-521-88010-7 (pb: 978-0-521-70597-4).
- Intergovernmental Panel on Climate Change. 2014. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. (Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, and L.L. White, Eds.). Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press. Available: [//ipcc-wg2.gov/AR5/report/](http://ipcc-wg2.gov/AR5/report/). Accessed: May 31, 2014.
- Kunkel, K.E., M. Palecki, L. Ensor, K.G. Hubbard, D. Robinson, K. Redmond, and D. Easterling. 2009. Trends in twentieth-century US snowfall using a quality-controlled dataset. *Journal of Atmospheric and Oceanic Technology* 26(1):33–44.
- Lehmkuhl, D.M. 1974. Thermal Regime Alterations and Vital Environmental Physiological Signals in Aquatic Systems. In *Thermal Ecology*. J.W. Gibbons and R.R. Sharitz, eds. AEC Symposium Series. CONF-730505. pp. 216–222.
- Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds. 2014. *Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program. 841 pp. doi:10.7930/J0Z31WJ2.
- Montana Department of Environmental Quality. 2003a. *Total Maximum Daily Load (TMDL) Status Report Tongue River TMDL Planning Area*. Prepared for the Montana Department of Environmental Quality by Tetra Tech, Inc.
- Montana Department of Environmental Quality. 2003b. *Total Maximum Daily Load (TMDL) Status Report Rosebud Creek TMDL Planning Area*. Prepared for the Montana Department of Environmental Quality by Tetra Tech, Inc.
- Montana Department of Environmental Services. 2013. *2013 Update State of Montana Multi-Hazard Mitigation Plan Statewide Hazard Assessment*.
- Mote, P., A.K. Snover, S. Capalbo, S.D. Eigenbrode, P. Glick, J. Littell, R. Raymond, and S. Reeder. 2014. *Ch. 21: Northwest. Climate Change Impacts in the United States: The Third National Climate Assessment*. J. M. Melillo, Terese (T.C.) Richmond, and G.W. Yohe, Eds., U.S. Global Change Research Program, 487–513. doi:10.7930/J04Q7RWX.
- National Research Council. 2008. *The Potential Impacts of Climate Change on U.S. Transportation*. Transportation Research Board Special Report 290. National Research

- Council (NRC). Available: [http://www.trb.org/news/blurb\\_detail.asp?ID=8794](http://www.trb.org/news/blurb_detail.asp?ID=8794). Accessed: May 26, 2014.
- Occupational Safety and Health Administration. 2011. *OSHA's Campaign to Prevent Heat Illness in Outdoor Workers: Using the Heat Index, A Guide for Employers*. U.S. Occupational Health and Safety Administration (OSHA). Available: [https://www.osha.gov/SLTC/heatillness/heat\\_index/index.html](https://www.osha.gov/SLTC/heatillness/heat_index/index.html). Accessed: May 29, 2014.
- Office of the Federal Coordinator for Meteorology. 2002. *Weather Information for Surface Transportation: National Needs Assessment Report (No. FCM-R18-2002)*. U.S. Department of Commerce/National Oceanic and Atmospheric Administration. Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM).
- Oregon Department of Forestry, Western Forestry Leadership Coalition, and Council of Western State Foresters. 2012. *West Side Wildfire Risk Assessment*. Final Report. Prepared by The Sanborn Map Company. Obtained with permission from the Montana Department of Natural Resources and Conservation's Fire and Aviation Management Bureau.
- Peterson, T.C., M. McGuirk, T.G. Houston, and A. Horvitz. 2008. *Climate Variability and Change with Implications for Transportation*. American Meteorological Society (AMS). 20th Conference on Climate Variability and Change. Available: [http://ams.confex.com/ams/88Annual/techprogram/paper\\_131039.htm](http://ams.confex.com/ams/88Annual/techprogram/paper_131039.htm). Accessed: May 22, 2009.
- Shafer, M., D. Ojima, J.M. Antle, D. Kluck, R.A. McPherson, S. Petersen, B. Scanlon, and K. Sherman. 2014. *Ch. 19: Great Plains. Climate Change Impacts in the United States: The Third National Climate Assessment*. J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds. U.S. Global Change Research Program, 441–461. doi:10.7930/J0D798BC.
- Schwartz, H.G., M. Meyer, C.J. Burbank, M. Kubly, C. Oster, J. Posey, E.J. Russo, and A. Rypinski. 2014. *Ch. 5: Transportation. Climate Change Impacts in the United States in The Third National Climate Assessment*. J.M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research Program, 130–149. doi:10.7930/J06Q1V53.
- Strzepek, K., G. Yohe, J. Neumann, and B. Boehlert. 2010. *Characterizing Changes in Drought Risk for the United States from Climate Change*. Environmental Research Letters, 5, 044012, doi:10.1088/1748-9326/5/4/044012. Available: [http://iopscience.iop.org/1748-9326/5/4/044012/pdf/1748-9326\\_5\\_4\\_044012.pdf](http://iopscience.iop.org/1748-9326/5/4/044012/pdf/1748-9326_5_4_044012.pdf). Accessed: May 30, 2014.
- U.S. Department of Transportation. 2012. *Assessing the Sensitivity of Transportation Assets to Climate Change in Mobile, Alabama*. Final Report, Task 2.4, The Gulf Coast Study,

Phase 2. U.S. Department of Transportation (DOT). Available: [http://www.fhwa.dot.gov/environment/climate\\_change/adaptation/ongoing\\_and\\_current\\_research/gulf\\_coast\\_study/phase2\\_task2/sensitivity\\_report/index.cfm](http://www.fhwa.dot.gov/environment/climate_change/adaptation/ongoing_and_current_research/gulf_coast_study/phase2_task2/sensitivity_report/index.cfm). Accessed: January 8, 2013.

U.S. Geological Survey. 2004. *Landslide Types and Processes Fact Sheet 2004-3072*. U.S. Geological Survey (USGS). Washington, D.C.

U.S. Geological Survey. 2014. *National Climate Change Viewer, Montana, Mean Model Results*. U.S. Geological Survey (USGS). Last revised: May 6, 2014. Available: [http://www.usgs.gov/climate\\_landuse/clu\\_rd/nex-dcp30.asp](http://www.usgs.gov/climate_landuse/clu_rd/nex-dcp30.asp). Accessed: May 24, 2014.

U.S. Global Climate Research Program. 2014. *2014 National Climate Assessment*

Westerling, A.L., H.G. Hidalgo, D.R. Cayan, and T.W. Swetnam. 2006. Warming and Earlier Spring Increase Western U.S. Forest Wildfire Activity. *Science* 313(5789):940–943. doi:10.1126/science.1128834.

## 22.5.3 Applicable Regulations

Center for Climate and Energy Solutions. 2014. U.S. Climate Policy Maps: *Greenhouse Gas Emissions Targets and Standards and Caps for Electricity GHG Emissions*. Available: <http://www.c2es.org/us-states-regions/policy-maps>. Accessed: May 5, 2014.

Climate Change Advisory Council. 2007. *Montana Climate Change Action Plan: Final Report of the Governor's Climate Change Advisory Committee*. Montana Department of Environmental Quality. Available: <http://deq.mt.gov/ClimateChange/plan.mcp>. Accessed: January 19, 2015.

Council on Environmental Quality. 2014. *Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*. Available: <https://federalregister.gov/a/2014-30035>. Accessed: January 17, 2015.

North Carolina Solar Center. 2014. *Database of State Incentives for Renewable Energy*. U.S. Department of Energy, Interstate Renewable Energy Council. Available: <http://www.dsireusa.org/>. Accessed: January 19, 2015.

U.S. Environmental Protection Agency. 2009. *Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act*. Available: <http://epa.gov/climatechange/endangerment/>. Accessed: January 19, 2015.

U.S. Environmental Protection Agency. 2013. *Standards of Performance for Greenhouse Gas Emissions From New Stationary Sources: Electric Utility Generating Units*. Available: <https://federalregister.gov/a/2013-28668>. Accessed: January 19, 2015.



Western Climate Initiative. 2010. *Design for the WCI Regional Program*. Available: <http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/program-design>. Accessed: May 8, 2014.

Western Climate Initiative. 2013. *Western Climate Initiative History*. Available: <http://www.westernclimateinitiative.org/history>. Accessed May 8, 2014.

## 22.6 Coal Dust

Agency for Toxic Substances and Disease Registry. 1992. *Toxicological Profile for Thallium*. Atlanta, GA: Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services.

Agency for Toxic Substances and Disease Registry. 2007. *Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine*. Atlanta, GA: Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services.

Australian Rail Track Corporation. 2013. *Pollution Reduction Program 4.2 Particulate Emissions from Coal Trains*. Final Report. Prepared by Katestone Environmental Pty Ltd. Available: [http://www.artc.com.au/library/news\\_2013-05-31\\_A1.pdf](http://www.artc.com.au/library/news_2013-05-31_A1.pdf). Accessed: May 31, 2013.

Brabin, B., M. Smith, P. Milligan, C. Benjamin, E. Dunne, and M. Pearson. 1994. Respiratory Morbidity in Merseyside School Children Exposed to Coal Dust and Air Pollution. *Arch Diseases in Childhood* 70(305).

BNSF Railway Company. 2010. Summary of BNSF/UP Super Trial 2010. Available: <http://www.bnsf.com/customers/pdf/coal-super-trial.pdf>. Accessed: September 21, 2012.

BNSF Railway Company. 2012. Before the Surface Transportation Board: STB Finance Docket No. 35557, Reasonableness of BNSF Railway Company Coal Dust Mitigation Tariff Provisions, BNSF Railway Company's Opening Evidence and Argument. October 1. Available: [http://www.stb.dot.gov/filings/all.nsf/d6ef3e0bc7fe3c6085256fe1004f61cb/7de6d7ad7088742985257a8a007009b1/\\$FILE/233088.PDF](http://www.stb.dot.gov/filings/all.nsf/d6ef3e0bc7fe3c6085256fe1004f61cb/7de6d7ad7088742985257a8a007009b1/$FILE/233088.PDF). Accessed: January 30, 2014.

BNSF Railway Company. 2013. *Coal Dust Mitigation Requirements*. In: Rules and Other Governing Provisions. Effective: June 4, 2013.

Calvin, E. M., G. D. Emmitt, and J. E. Williams. 1993. *A Rail Emission Study: Fugitive Coal Dust Assessment and Mitigation*. Simpson Weather Associates. Available: <http://www.powerpastcoal.org/wp-content/uploads/2011/08/a-rail-emission-study-fugitive-coal-dust-assessment-and-mitigation.pdf>.

- Canadian Council of Ministers of the Environment. 2001. *A Study of Fugitive Coal Dust Emissions in Canada*. November. Available: <http://www.powerpastcoal.org/wp-content/uploads/2011/08/Fugitive-Coal-Dust-Emissions-in-Canada-2001.pdf>. Accessed: April 5, 2013.
- Centers for Disease Control. 2011. *Coal Mine Dust Exposures and Associated Health Outcomes: A Review of Information Published Since 1995*. Available: <http://www.cdc.gov/niosh/docs/2011-172/pdfs/2011-172.pdf>.
- Cope, D. L., E. Wituschek, D. Poon, and D. Halliburton. 1986. *Report on the Emission and Control of Fugitive Coal Dust from Coal Trains*. Environment Canada.
- DSITIA (Queensland Government, Department of Science, Information Technology, Innovation, and the Arts). 2012. *Tennyson Dust Monitoring Investigation September to October 2012*. Available: <http://www.ehp.qld.gov.au/air/pdf/tennyson-dust-report.pdf>. Accessed: May 3, 2013.
- Efroymson, R. A., M. E. Will, G. W. Suter II, and A. C. Wooten. 1997. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision*. Oak ridge, TN: Oak Ridge National Laboratory. ES/ER/TM-85/R3. Available: <http://www.esd.ornl.gov/programs/ecorisk/documents/tm85r3.pdf>. Accessed: May 22, 2014
- Ferreira, A. D., D. X. Viegas, and A. C. M. Sousa. 2003. Full-Scale Measurements for Evaluation of Coal Dust Release from Train Wagons with Two Different Shelter Covers. *Journal of Wind Engineering and Industrial Aerodynamics* 91:1271–1283. Available: <https://estudogeral.sib.uc.pt/bitstream/10316/4267/1/file96f6b81b011048b0a49332dc1130935f.pdf>. Accessed: October 1, 2012.
- Ferreira, A. D. and P. A. Vaz. 2004. Wind Tunnel Study of Coal Dust Release from Train Wagons. *Journal of Wind Engineering and Industrial Aerodynamics* 92:565-577. Available: <https://estudogeral.sib.uc.pt/bitstream/10316/4257/1/file8c791676e1104473bb45a19437ea77f6.pdf>. Accessed: October 1, 2012.
- Fraser Surrey Docks. 2013. *Temporary Coal Offloading Facility, Preliminary Environmental Management Plan for Construction and Operations*. Surrey, BC, Canada: Fraser Surrey Docks.
- Goldberg, K. 2013. *Law360: Sierra Club Sues BNSF over Coal Spillage from Railcars*. June 5. Available: <http://www.law360.com/articles/447727/sierra-club-sues-bnsf-over-coal-spillage-from-railcars>. Accessed: July 21, 2014.
- Hazardous Substance Data Bank. 2013. *Hazardous Substance Data Bank*. U.S. National Library of Medicine. Available: <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>. Accessed: May 5, 2014.

- John, D. A. and J. S. Leventhal. 1995. *Bioavailability of Metals*. U.S. Geological Survey. Available: <http://pubs.usgs.gov/of/1995/ofr-95-0831/CHAP2.pdf>. Accessed: May 15, 2014.
- Kabala, C. and B. R. Singh. 2001. Fractionation and Mobility of Copper, Lead, and Zinc in Soil Profiles in the Vicinity of a Copper Smelter. *Journal of Environmental Quality* 30.2: 485–492.
- Moffatt, S. and T. Pless-Mulloli. 2003. ‘It Wasn’t the Plague We Expected.’ Parents Perceptions of the Health and Environmental Impact of Opencast Coal Mining. *Social Science and Medicine* 57(3):437–451.
- Montana Department of Environmental Quality. 2003. *Total Maximum Daily Load (TMDL) Status Report, Tongue River TMDL Planning Area*. Prepared for the Montana Department of Environmental Quality by Tetra Tech, Inc. Technical support and direction provided by the U.S. EPA.
- Montana Department of Environmental Quality. 2012. *State of Montana Air Quality Monitoring Network Plan*. Available: [deq.mt.gov/airquality/aqinfo/pdf/2012\\_network\\_plan.pdf](http://deq.mt.gov/airquality/aqinfo/pdf/2012_network_plan.pdf). Accessed: March 26, 2013.
- Montana Department of Environmental Quality, 2012, Montana numeric water quality standards: Circular DEQ–7, 76 p., accessed November 14, 2014, at <http://deq.mt.gov/wqinfo/circulars.mcp>
- Montana Department of Natural Resources and Conservation. 2006. Otter Creek Data CD – Version 2006.08.15. Helena, MT: Trust Land Management Division, Montana Department of Natural Resources and Conservation.
- New South Wales Ministry of Health. 2007. *Mine Dust and You*. Fact sheet developed with the NSW Minerals Council. Available: <http://www.health.nsw.gov.au/environment/factsheets/Pages/mine-dust.aspx>. Accessed: May 3, 2014.
- Oak Ridge National Laboratory. 2013. *The Risk Assessment Information System (RAIS) Ecological Benchmark Tool*. Available: [http://rais.ornl.gov/tools/eco\\_search.php](http://rais.ornl.gov/tools/eco_search.php). Accessed: May 28, 2014.
- Pless-Mulloli, T., D. Howel, A. King, I. Stone, J. Merefield, J. Bessell, and R. Darnell. 2000. Living Near Opencast Coal Mining Site and Children’s Respiratory Health. *Occupational Environmental Medicine* 57:145–151.
- Pope, C. A. III, R. T. Burnett, M. J. Thun, E. E. Calle, D. Krewski, K. Ito, and G. D. Thurston. 2002. Lung Cancer, Cardiopulmonary Mortality, and Long-Term Exposure to Fine Particulate Air Pollution. *The Journal of the American Medical Association* 287(9): 1132–1141.

- Pope, C. A. III, R. T. Burnett, G. D. Thurson, M. J. Thun, E. E. Calle, D. Krewski, J. J. Godleski. 2004. Cardiovascular Mortality and Long-Term Exposure to Particulate Air Pollution: Epidemiological Evidence of General Pathophysiological Pathways of Disease. *Circulation* 109(1):71–77.
- Queensland Government Safety in Mines Testing and Research Station. 2007. *Gladstone Airborne Coal Dust Monitoring: Complete Report for Queensland Railroad National Report*. 101776f3.
- Queensland Rail Ltd. (now Aurizon). 2008. *Final Report, Environmental Evaluation of Fugitive Coal Dust Emissions from Coal Trains Goonyella, Blackwater, and Moura Coal Rail Systems*. Prepared by Connell Hatch Ltd. (now Aurecon Hatch). Report number H327578-N00-EE00.00. 31 March. Available: [http://www.aurizon.com.au/InfrastructureProjects/Rail%20Network/Coal\\_Loss\\_Management\\_Project\\_Environmental\\_Evaluation.pdf](http://www.aurizon.com.au/InfrastructureProjects/Rail%20Network/Coal_Loss_Management_Project_Environmental_Evaluation.pdf).
- Ryan, L. 2014. *Re-Analysis of ARTC Data on Particulate Emissions from Coal Trains*. AccessUTS, a controlled entity of the University of Technology. Sidney. Prepared for New South Wales Environmental Protection Authority. February 25. Available: <http://www.epa.nsw.gov.au/resources/air/ARTCcreanalysisFeb2014.pdf>. Accessed: March 27, 2014.
- Sierra Club. 2014. *Press Release: Major Victory – Coal Dust Case Advances Against BNSF for U.S. Clean Water Act Violations*. Available: <http://content.sierraclub.org/coal/washington/press/press-releases/2014/01/major-victory-coal-dust-case-advances-against-bnsf-us-clean-water-act>. Accessed: July 21, 2014.
- Stepniewska, Z., A. Pytlak, J. Buk, and G. Bojarczuk. 2010. Leachability of Heavy Metals (Fe, Zn and Ni) from Coal Mine Rocks. *Proceedings of ECOpole* 4(2).
- Surface Transportation Board. 2011. *Decision, Docket No. FD 35305, Arkansas Electric Cooperative Corporation—Petition for Declaratory Order*. Decision ID 40436. March 3. Available: <http://www.stb.dot.gov/decisions/readingroom.nsf/WEBUNID/79B5382AE20F7930852578480053111F?OpenDocument>. Accessed: June 27, 2013.
- Surface Transportation Board. 2013. *Decision: Reasonableness of BNSF Railway Company Coal Dust Mitigation Tariff Provisions*. Docket No. FD 35557. Available: [http://www.stb.dot.gov/decisions/readingroom.nsf/UNID/F72AEB8A1B352D5F85257C40004B22C7/\\$file/42170.pdf](http://www.stb.dot.gov/decisions/readingroom.nsf/UNID/F72AEB8A1B352D5F85257C40004B22C7/$file/42170.pdf). Accessed: May 22, 2014.
- Temple, J. M. and A. M. Sykes. 1992. Asthma and Open Cast Mining. *British Medical Journal* 305(396).
- U.S. Environmental Protection Agency. 1996. *Ambient Levels and Noncancer Health Effects of Inhaled Crystalline and Amorphous Silica: Health Issue Assessment*. EPA/600/6-95/115. Available:

- [http://ofmpub.epa.gov/eims/eimscomm.getfile?p\\_download\\_id=4608](http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=4608). Accessed March 1, 2013.
- U.S. Environmental Protection Agency. 1999. *Screening Level Ecological Risk Assessment Protocol*. Appendix C: Media to receptor bioconcentration factors (BCFs). Office of Solid Waste, U.S. Environmental Protection Agency. Available: <http://www.epa.gov/osw/hazard/tsd/td/comburst/eco-risk/volume3/appx-c.pdf>. Accessed: May 5, 2014.
- U.S. Environmental Protection Agency. 2002. *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites: Appendix A–C*. Available: <http://www.epa.gov/superfund/health/conmedia/soil/> Accessed: May 5, 2014.
- U.S. Environmental Protection Agency. 2005. *Guidance for Developing Ecological Screening Levels*. Created November 2003, Revised February 2005. Office of Solid Waste and Emergency Response. Washington, D.C.
- U.S. Environmental Protection Agency. 2006. AP42, Fifth Edition, Volume I. Section 13.2.4, Aggregate Handling and Storage Piles. November. Available: <http://www.epa.gov/ttnchie1/ap42/ch13/>. Accessed: May 15, 2014.
- U.S. Environmental Protection Agency. 2007. *Guidance for Evaluating the Oral Bioavailability of Metals in Soils for Use in Human Health Risk Assessment*. Office of Solid Waste and Emergency Response.
- U.S. Environmental Protection Agency. 2008. *Risk Based Concentration Table*. Support Memo for RBC Table Users. Available: <http://www.epa.gov/reg3hwmd/risk/human/pdf/covsep08.pdf>. Accessed: May 6, 2014.
- U.S. Environmental Protection Agency. 2009. *National Primary Drinking Water Regulations EPA 816-F-09-004*. Office of Water. Available: <http://water.epa.gov/drink/contaminants/upload/mcl-2.pdf>. Accessed: May 15, 2014.
- U.S. Environmental Protection Agency. 2011. *Exposure Factors Handbook*: 2011 Edition. National Center for Environmental Assessment, Office of Research and Development.
- U.S. Environmental Protection Agency. 2013a. *Particulate Matter: Basic Information. How Big is Particle Pollution?* Image. Available: [http://www.epa.gov/particles/graphics/pm2\\_5\\_graphic\\_lg.jpg](http://www.epa.gov/particles/graphics/pm2_5_graphic_lg.jpg). Accessed: July 18, 2014.
- U.S. Environmental Protection Agency. 2013b. *Regional Screening Table*. Available: [http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\\_table/index.htm](http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm). Accessed: May 15, 2014.
- U.S. Environmental Protection Agency. 2013c. *Region 3 Fish Tissue Screening Levels* November. Available: <http://www.epa.gov/reg3hwmd/risk/human/index.htm> Accessed: May 6, 2014.

- U.S. Environmental Protection Agency. 2013d. *Freshwater Screening Benchmarks*. Ecological Risk Assessment – Biological Technical Assistance Group, EPA Region 3 Available: <http://www.epa.gov/reg3hwmd/risk/eco/btag/sbv/fw/screenbench.htm>. Accessed: May 16, 2014.
- U.S. Environmental Protection Agency. 2014a. *Risk Assessment Glossary*. Available: [http://www.epa.gov/risk\\_assessment/glossary.htm#r](http://www.epa.gov/risk_assessment/glossary.htm#r). Accessed: May 5, 2014.
- U.S. Environmental Protection Agency. 2014b. *Integrated Risk Information System (IRIS): A-Z List of Substances*. Available: <http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showSubstanceList>. Accessed: May 16, 2014.
- U.S. Environmental Protection Agency. 2014c. *Particulate Matter (PM): Health*. Available: <http://www.epa.gov/airquality/particulatematter/health.html>. Accessed: July 25, 2014.
- U.S. Environmental Protection Agency. 2014c. *Draft Residual Risk Assessment for the Petroleum Refining Source Section, Appendix 4. Technical Support Document for the TRIM-Based Multipathway Tiered Screening Methodology for RTR*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC.
- U.S. Geological Survey. 2000. *Health Impacts of Coal Combustion*. Available: <http://pubs.usgs.gov/fs/fs94-00/fs094-00.pdf>. Accessed: July 25, 2014.
- U.S. Geological Survey. 2007. *Water-Quality Characteristics for Sites in the Tongue, Powder, Cheyenne, and Belle Fourche River Drainage Basins, Wyoming and Montana, Water Years 2001-05, with Temporal Patterns of Selected Long-Term Water-Quality Data*. Scientific Investigations Report 2007-5146. U.S. Department of the Interior, U.S. Geological Survey. Available: <http://pubs.usgs.gov/sir/2007/5146/pdf/sir2007-5146.pdf>
- Witt, P., K. Carey, and T. Nguyen. 1999. *Prediction of Dust Loss from Conveyors Using CFD Modeling*. Second International Conference on CFD in the Minerals and Process Industries, CSIRO, Melbourne. Available: [http://www.cfd.com.au/cfd\\_conf99/papers/062witt.pdf](http://www.cfd.com.au/cfd_conf99/papers/062witt.pdf).

## 22.6.1 Personal Communications

- Cain, Cyra. Montana Department of Environmental Quality. August 3, 2012—Email to Susan Bassett, Bureau of Land Management.
- Coburn, David. Steptoe & Johnson LLP. June 17, 2013—Letter to Victoria Rutson, Surface Transportation board, Office of Environmental Analysis.
- Walsh, Vickie. Montana Department of Environmental Quality. July 12, 2012—Email to Susan Bassett, Bureau of Land Management.

## 22.7 Noise and Vibration

- Coate, D. 1999. *Annoyance Due to Locomotive Warning Horns*. Transportation Research Board Noise and Vibration Subcommittee A1FO4. August 1–4. San Diego, CA.
- Federal Railroad Administration. 1999. *Draft Environmental Impact Statement, Proposed Rule for the Use of Locomotive Horns at Highway-Rail Grade Crossings*.
- Federal Railroad Administration. 2012. *High-Speed Ground Transportation Noise and Vibration Impact Assessment Final Rule*. Available: <http://www.fra.dot.gov/eLib/Details/L04090>.
- Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. May. (FTA-VA-90-1003-06.) Available: [http://www.fta.dot.gov/documents/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf).
- Surface Transportation Board. 1998a. *Final Environmental Impact Statement No. 980194, Conrail Acquisition (Finance Docket No. 33388) by CSX Corporation and CSX Transportation, Inc., and Norfolk Southern Corporation and Norfolk Southern Railway Company (NS)*.
- Surface Transportation Board. 1998b. *Draft Environmental Assessment Canadian National/Illinois Central Railroad Acquisition*.
- Tongue River Railroad Company. 2013. Response to the Second Information Request, Question 18. Received May 3.
- U.S. Environmental Protection Agency. 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*.
- U.S. Environmental Protection Agency. 2014a. *Summary of the Noise Control Act 42 U.S.C. §4901 et seq. (1972)*. Available: <http://www2.epa.gov/laws-regulations/summary-noise-control-act>.
- U.S. Environmental Protection Agency. 2014b. National Service Center for Environmental Publications: *Railroad Noise Emission Standard (40 C.F.R. § 201)*. Available: <http://nepis.epa.gov/Exe/ZyNET.exe/20016M33.txt?ZyActionD=ZyDocument&Client=EPA&Index=Prior%20to%201976&Docs=&Query=&Time=&EndTime=&SearchMethod=1&To cRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C70THRU75%5CTXT%5C000000006%5C20016M33.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r85g16/r85g16/x150y150g16/i500&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackD esc=Results%20page&MaximumPages=1&ZyEntry=5>.

## 22.8 Biological Resources

### 22.8.1 Vegetation

- Agency for Toxic Substances and Disease Registry. 1995. *Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs)*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control.
- Alabama Cooperative Extension System. 2013. *A Guide to Preventing Soil Compaction during Construction*. Document ANR – 1455. Alabama A&M and Auburn Universities. 24 p. Available: <http://www.aces.edu/pubs/docs/A/ANR-1455/ANR-1455.pdf>. Accessed: January 23, 2014.
- Anderson, J. R., E. Hardy, J. Roach, and R. Witmer. 1976. *A Land Use and Land Cover Classification System for Use with Remote Sensor Data*. Geological Survey Professional Paper 962. Prepared for the U.S. Geological Survey.
- California Department of Forestry and Fire Protection, Bureau of Land Management, Union Pacific, Burlington Northern Santa Fe, and U.S. Forest Service. 1999. *Railroad Fire Prevention Field Guide*. Available: <http://osfm.fire.ca.gov/codedevelopment/pdf/firesafetyplanning/rroperations/rrfirepreventionguide.pdf>. Accessed: April 1, 2014.
- Cheng, S. 2003. Effects of Heavy Metals on Plants and Resistance Mechanisms. *Environmental Science and Pollution Research* 10 (4):256–264. Available: <http://link.springer.com/article/10.1065 percent2Fespr2002.11.141.2>. Accessed: October 8, 2013.
- Comer, P., D. Faber-Langendoen, R. Evans, S. Gawler, C. Josse, G. Kittel, S. Menard, M. Pyne, M. Reid, K. Schulz, K. Snow, and J. Teague. 2003. *Ecological Systems of the United States: A Working Classification of U.S. Terrestrial Systems*. Arlington, VA: NatureServe.
- Liu, H., D. Weisman, Y.B. Ye, B. Cui, Y.H. Huang, A. Colon-Carmona, Z.H. Wang. 2009. An Oxidative Stress Response to Polycyclic Aromatic Hydrocarbon Exposure Is Rapid and Complex in *Arabidopsis thaliana*. *Plant Science* 176 (3):375–382.
- Montana Department of Agriculture. 2013. *Montana Noxious Weed List*. Effective: December 2013. Available: <http://agr.mt.gov/agr/Programs/Weeds/PDF/2013WeedList.pdf>. Accessed: February 7, 2014.
- Montana Department of Military Affairs Disaster and Emergency Services. 2010. *2010 Update to the State of Montana Multi-Hazard Mitigation Plan and Statewide Hazard Assessment*. November. Available: <http://montanadma.org/montana-mitigation-plan>. Accessed: January 23, 2014.



- Montana Department of Natural Resources and Conservation. 2007. *2007 DNRC Fire Statistics*. Available: <http://dnrc.mt.gov/Forestry/Fire/Statistics/2007statistics.asp>. Accessed: January 23, 2014.
- Montana Department of Natural Resources and Conservation. 2008. *2008 DNRC Fire Statistics*. Available: <http://dnrc.mt.gov/Forestry/Fire/Statistics/2008statistics.asp>. Accessed: January 23, 2014.
- Montana Department of Natural Resources and Conservation. 2010. *2010 DNRC Fire Statistics*. Available: <http://dnrc.mt.gov/Forestry/Fire/Statistics/2010statistics.asp>. Accessed: January 23, 2014.
- Montana Department of Natural Resources and Conservation. 2011. *2011 DNRC Fire Statistics*. Available: <http://dnrc.mt.gov/Forestry/Fire/Statistics/2011statistics.asp>. Accessed: January 23, 2014.
- Montana Fish, Wildlife & Parks. 2010. *Montana Fish, Wildlife & Parks Fishing Access Site Noxious Weed Inventory Locations (2005-2009)*. GIS data collected by Montana Department of Agriculture. Helena, MT. Available: <http://fwp.mt.gov/doingBusiness/reference/gisData/dataDownload.html>. Accessed: January 24, 2014.
- Montana Natural Heritage Program. 2013. *Montana Land Cover/Land Use Theme*. Based on classifications originally developed by the University of Idaho, Sanborn and the MTNHP for the Pacific Northwest ReGAP project. Helena, MT. Obtained by email from MTNHP staff on January 8, 2014.
- Montana Noxious Weed Summit Advisory Council. 2008. *Montana Weed Management Plan*. Weed Management Task Force. In cooperation with Montana Weed Control Association, Federal and State Agencies, Montana University System, County Weed Districts, and Private Land Managers. Available: <http://agr.mt.gov/agr/Programs/Weeds/PDF/2008weedPlan.pdf>. Accessed: January 23, 2014.
- Oregon Department of Forestry, Western Forestry Leadership Coalition, and Council of Western State Foresters. 2012. *West Side Wildfire Risk Assessment*. Final Report. Prepared by the Sanborn Map Company. Obtained with permission from the Montana Department of Natural Resources and Conservation's Fire and Aviation Management Bureau.
- Simonich, S. L., and R. A. Hites. 1994. Vegetation-Atmospheric Partitioning of Polycyclic Aromatic Hydrocarbons. *Environmental Science and Technology* 28(5):939–943.
- U.S. Forest Service. 2000. *Wildland Fires in Ecosystems: Effects of Fire on Fauna*. General Technical Report RMRS-GTR-42, Volume 1. Ogden, UT: U.S. Department of Agriculture, Rocky Mountain Research Station.
- U.S. Global Climate Change Research Program. 2009. *Global Climate Change Impacts in the United States: A State of Knowledge Report from the U.S. Global Climate Change Research Program*. Report produced for the Subcommittee on Global Climate Change

Research and at the request of the U.S. government. Available:  
<http://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf>.  
Accessed: February 27, 2014.

Wilkomirski, B., B. Sudnik-Wojcikowska, H. Galera, M. Wierzbicka, and M. Malawska.  
2011. Railway Transportation as a Serious Source of Organic and Inorganic Pollution.  
*Water, Air, & Soil Pollution* 218(1–4):333–345.

## 22.8.2 Wildlife

Avian Power Line Interaction Committee. 2012. *Reducing Avian Collisions with Powerlines: The State of the Art in 2012*. Washington, DC: Edison Electric Institute and Author.

Bureau of Land Management. 2013a. *Miles City Field Office Draft Resource Management Plan and Environmental Impact Statement: Chapter 3 Affected Environment*. Miles City, MT.

Bureau of Land Management. 2013b. *BLM Raptor Nest Data* (unpublished data). Miles City, MT.

Farmer, P. 2012. *Environmental Baseline Report 304 K: Fish and Wildlife Resources Baseline Inventory Otter Creek Mine, Powder River County, Montana*. Final. Helena, MT. Prepared for Otter Creek Coal, LLC., Billings, MT.

Mackie, R. J., D. F. Pac, K. L. Hamlin, and G. L. Dusek. 1998. *Ecology and Management of Mule Deer and White-Tailed Deer in Montana*. Final. Federal Aid Project W-120-R. Helena, MT. Prepared for Montana Fish, Wildlife, and Parks Wildlife Division.

Martin, P. R. 1980. *Terrestrial Wildlife Habitat Inventory in Southeastern Montana*. Final. Prepared by Montana Fish, Wildlife & Parks for Bureau of Land Management.

Montana Fish, Wildlife & Parks. 2001. *Bice/Hirsch Ranches Conservation Easement: Environmental Assessment, Management Plan, and Socio-Economic Assessment*. Final. Miles City, MT.

Montana Fish, Wildlife & Parks. 2011. *2011 Antelope Population Estimates*. Last revised: 2011. Available: <http://fwp.mt.gov/fishAndWildlife/management/antelope/>. Accessed: September 12, 2013.

Montana Fish, Wildlife & Parks. 2012. *2012 Antelope Population Estimates*. Last revised: 2012. Available: <http://fwp.mt.gov/fishAndWildlife/management/antelope/>. Accessed: September 12, 2013.

Montana Fish, Wildlife & Parks. 2013a. *Distribution – Antelope (General and Winter)*. Last revised: 2013. Available: <http://fwp.mt.gov/doingBusiness/reference/gisData/dataDownload.html>. Accessed: September 13, 2013.

- Montana Fish, Wildlife & Parks. 2013b. *Distribution – Mule Deer (General and Winter)*. Last revised: 2013. Available: <http://fwp.mt.gov/doingBusiness/reference/gisData/dataDownload.html>. Accessed: September 13, 2013.
- Montana Fish, Wildlife & Parks. 2013c. *Distribution – White-Tailed Deer (General and Winter)*. Last revised: 2013. Available: <http://fwp.mt.gov/doingBusiness/reference/gisData/dataDownload.html>. Accessed: September 13, 2013.
- Montana Fish, Wildlife & Parks. 2013d. *2013 Mule Deer Status*. Last revised: 2013. Available: <http://fwp.mt.gov/fishAndWildlife/management/deer/default.html>. Accessed: September 12, 2013.
- Montana Fish, Wildlife & Parks. 2013e. *2013 White-Tailed Deer Status*. Last revised: 2013. Available: <http://fwp.mt.gov/fishAndWildlife/management/deer/default.html>. Accessed: September 12, 2013.
- Montana Fish, Wildlife & Parks. 2013f. *2013 Antelope Population Estimates*. Last revised: 2013. Available: <http://fwp.mt.gov/fishAndWildlife/management/antelope/>. Accessed: September 12, 2013.
- Montana Natural Heritage Program. 2013a. *Big Horn SOC*. ArcMap geodatabase file. Helena, MT: Montana State Library.
- Montana Natural Heritage Program. 2013b. *Tongue River Railroad SOC*. ArcMap geodatabase file. Helena, MT: Montana State Library.
- Phillips, R. L., D. E. Biggins, and A. B. Hoag. 1986. *Coal Surface Mining and Selected Wildlife – A 10-year Case Study near Decker, Montana* (pp. 235–245). Proceedings II: Issues and Technology in the Management of Affected Western Wildlife. Boulder, CO.
- Polfus, J. L. 2011. *Literature Review and Synthesis on the Effects of Residential Development on Ungulate Winter Range in the Rocky Mountain West*. Helena, MT: Montana Fish, Wildlife, and Parks.
- Romin, L. A., and J. A. Muck. 2002. *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances*. Salt Lake City, UT: U.S. Fish and Wildlife Service, Utah Field Office. Available: [http://www.fws.gov/utahfieldoffice/Documents/MigBirds/Raptor Guidelines \(v March 20, 2002\).pdf](http://www.fws.gov/utahfieldoffice/Documents/MigBirds/Raptor%20Guidelines%20(v%20March%202002).pdf).
- U.S. Forest Service. 2013. *USFS 2012 Fire Line Boundary Data* (unpublished data). Ashland, MT: Ashland Ranger District.

## 22.8.3 Fish

- Amoser, S. and F. Ladich. 2005. Are Hearing Sensitivities of Freshwater Fish Adapted to the Ambient Noise in Their Habitats? In *Journal of Experimental Biology* 208:3,533–3,542.
- Banner, A. and M. Hyatt. 1973. Effects of Noise on Eggs and Larvae of Two Estuarine Fishes. In *Transactions of the American Fisheries Society* 102:134–136.
- Bisson, P. A. and D. R. Montgomery. 1996. Valley Segments, Stream Reaches, and Channel Units. F. R. Hauer and G. A. Lamberti (eds.). In *Methods in Stream Ecology*, pp. 23–52. San Diego, CA: Academic Press.
- California Department of Transportation. 2009. *Technical Guidance for Assessment and Mitigation of the Hydroacoustic Effects of Pile Driving on Fish*. Prepared by ICF Jones & Stokes and Illingworth and Rodkin. Sacramento, CA: California Department of Transportation.
- Chase, K. J. 2004. *Channel-Morphology Data for the Tongue River and Selected Tributaries, Southeastern Montana, 2001–2002*. U.S. Geological Survey Open-File Report 2004-1260. U.S. Geological Survey in cooperation with the Bureau of Land Management.
- Fitzpatrick, F. A., I. R. White, P. J. D’Arconte, M. R. Meador, M. A. Maupin, and M. E. Gurtz. 1998. *Revised Methods for Characterizing Stream Habitat in the National Water-Quality Assessment Program*. U.S. Geological Survey Water-Resources Investigations Report 98-4052, 59 pp. plus appendices.
- Hastings, M. C., A. N. Popper, J. J. Finneran, and P. Lanford. 1996. Effects of Low-Frequency Sound on Hair Cells of the Inner Ear and Lateral Line of the Teleost Fish, *Astronotus ocellatus*. In *Journal of the Acoustical Society of America* 99(3):1,759–1,766.
- Hastings, M. C. and A. N. Popper. 2005. *Effects of Sound on Fish*. White paper prepared for ICF Jones & Stokes. January.
- Montana Fish, Wildlife & Parks. 2013. *Montana Fish Distribution – Streams*. GIS data set of fish species distribution based on presence/absence surveys conducted in the study area between 2005 and 2012. Last revised: 2012. Available: <http://fwp.mt.gov/doingBusiness/reference/gisData/dataDownload.html>. Accessed: April 2013.
- Omernik, J. M. 1995. Ecoregions: A Spatial Framework for Environmental Management. Chapter 5. W. Davis and T. Simon (eds.). In *Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making*, pp. 49–64. Boca Raton, FL; London, UK: Lewis Publishers.

- Popper, A. N., M. E. Smith, P. A. Cot, B. W. Hanna, A. O. McGillivray, M. E. Austin, and D. A. Mann. 2005. Effects of Exposure to Seismic Airgun Use on Hearing of Three Fish Species. In *Journal of the Acoustical Society of America* 117:3958–3971.
- Scholik, A. R. and H. Y. Yan. 2001. Effects of Underwater Noise on Auditory Sensitivity of a Cyprinid Fish. In *Hearing Research* 152:17–24.
- Scholik, A. R. and H. Y. Yan. 2002. Effects of Boat Engine Noise on Auditory Sensitivity of the Fathead Minnow, *Pimephales promelas*. In *Environmental Biology of Fishes* 63:203–209.
- Schumm, S.A. 1977. *The Fluvial System*. New York: John Wiley and Sons.
- Stagliano, D. M. 2005. *Aquatic Community Classification and Ecosystem Diversity in Montana's Missouri River Watershed*. Prepared for the U.S. Department of Interior, Bureau of Land Management, by the Montana State Library—Montana Natural Heritage Program. Helena, MT.
- U. S. Environmental Protection Agency. 2012. *Level III and Level IV Ecoregions of the Continental United States*. U. S. Environmental Protection Agency, Western Ecology Division. Map products available in GIS and PDF format. Available: [http://www.epa.gov/wed/pages/ecoregions/level\\_iii\\_iv.htm](http://www.epa.gov/wed/pages/ecoregions/level_iii_iv.htm). Accessed: December 1, 2012.
- Washington State Department of Transportation. 2013. *Biological Assessment Preparation for Transportation Projects – Advanced Training Manual*. Version 2013. Prepared for the Washington State Department of Transportation by Herrera Environmental Consultants. Olympia, WA.
- Watershed Professionals Network. 1999. *Oregon Watershed Assessment Manual*. Prepared for the Governor's Watershed Enhancement Board. July.

### 22.8.3.1 Personal Communications

- Schmitz, Brad. 2013. Montana Fish, Wildlife & Parks. April 8, 2013—telephone conversation.

### 22.8.4 Special-Status Species

- Aldridge, C. L. 2005. *Identifying Habitats For Persistence Of Greater Sage-Grouse (Centrocercus Urophasianus) in Alberta, Canada*. Doctoral dissertation. University of Alberta, Edmonton, Alberta.
- Aldridge, C. L. and M. S. Boyce. 2007. Linking Occurrence and Fitness to Persistence: Habitat-Based Approach for Endangered Greater Sage-Grouse. *Ecological Applications* 17(2):508–526. Available: <<http://www.ncbi.nlm.nih.gov/pubmed/17489256>>.

- Anthony, R. G., R. L. Knight, G. T. Allen, R. B. McClelland and J. I. Hodges. 1982. *Habitat Use by Nesting and Roosting Bald Eagles in the Pacific Northwest*. Final USFWS Publications Paper 34.
- Atkinson, S. J. and A. R. Dood. 2006. *Montana Interior Least Tern Management Plan*. Final. Bozeman, MT. Prepared for Montana Fish, Wildlife & Parks.
- Barton, B. A. 2002. Stress in Fishes: A Diversity of Responses with Particular Reference to Changes in Circulating Corticosteroids. *Integrative and Comparative Biology* 42(3):517–525.
- Blickley, J. L., B. Blackwood, and G. L. Patricelli. 2012. Experimental Evidence for the Effects of Chronic Anthropogenic Noise on Abundance of Greater Sage-Grouse at Leks. *Conservation Biology* 26(3):461–471. doi:10.1111/j.1523-1739.2012.01840.x
- Bonham, C. D. and A. Lerwick. 1976. Vegetation Changes Induced by Prairie Dogs on Shortgrass Range. *Journal of Range Management*. 29(3):221–225.
- Buehler, D. A., T. J. Mersmann, J. D. Fraser, and J. K. D. Seegar. 1991. Nonbreeding Bald Eagle Communal and Solitary Roosting Behavior and Roost Habitat on the Northern Chesapeake Bay. *Journal of Wildlife Management* 55(2):273–281.
- Bureau of Land Management. No date. *Special Status Plant Species Site Clearance Protocol*. Miles City Field Office.
- Bureau of Land Management. 2008. BLM Manual 6840 – Special Status Species Management. Release 6-125. Available:  
<[http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information\\_Resources\\_Management/policy/im\\_attachments/2009.Par.13736.File.dat/IM2009-039\\_att1.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2009.Par.13736.File.dat/IM2009-039_att1.pdf)>. Accessed: February 11, 2014.
- Bureau of Land Management. 2009. *Guidance for Greater Sage-Grouse Management and Conservation in Resource Management Plan (RMP) Revisions in Management Zones 1 and 2 in the Montana/Dakotas BLM*. Final. Instruction Memorandum No. MT-2010-017. Billings, MT: Montana State Office.
- Bureau of Land Management. 2013. *Miles City Field Office Draft Resource Management Plan and Environmental Impact Statement: Chapter 3 Affected Environment*. Draft. Miles City, MT.
- Bureau of Land Management. 2014. *2014 Montana/Dakotas BLM Special Status Species List*. Instruction Memorandum No. MT-2014-067. BLM Montana State Office. Billings, MT
- Canadian Wildlife Service and U.S. Fish and Wildlife Service. 2007. *International Recovery Plan for the Whooping Crane*. Final. Ottawa, Canada and Albuquerque, NM.

- Connelly, J. W. and C. E. Braun. 1997. Long-term Changes in Sage Grouse (*Centrocercus urophasianus*) Populations in Western North America. *Wildlife Biology* 3(3):229–234.
- Connelly, J. W., S. T. Knick, M. A. Schroeder, and S. J. Stiver. 2004. *Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats*. Unpublished manuscript, Cheyenne, WY: Western Association of Fish and Wildlife Agencies. Available: <[http://www.ndow.org/wild/conservation/sg/resources/greate\\_sg\\_cons\\_assessment.pdf](http://www.ndow.org/wild/conservation/sg/resources/greate_sg_cons_assessment.pdf)>.
- Dinsmore, S. J., G. C. White, and F. L. Knopf. 2005. Mountain Plover Populations Responses to Black-Tailed Prairie Dogs in Montana. *Journal of Wildlife Management* 69(4):1546–1553.
- Doherty, K. E., D. E. Naugle, B. L. Walker, and J. M. Graham. 2008. Greater Sage-Grouse Winter Habitat Selection and Energy Development. *Journal of Wildlife Management* 72(1):187–195. doi:10.2193/2006-454.
- Esch, K. L., G. P. Beauvais, and D. A. Keinath. 2005. *Species Conservation Assessment for Black Footed Ferret (Mustela nigripes) in Wyoming*. Final. Laramie, WY. Prepared for Bureau of Land Management, Cheyenne, WY.
- Farmer, P. 2012. *Environmental Baseline Report 304 K: Fish and Wildlife Resources Baseline Inventory Otter Creek Mine, Powder River County, Montana*. Final. Helena, MT. Prepared for Otter Creek Coal, LLC, Billings, MT.
- FaunaWest Wildlife Consultants. 2012. *Summary of Black-Tailed Prairie Dog Colony Mapping Efforts at Five Colony Complexes in Central and southeastern Montana*. Final. Townsend, MT. Prepared for Montana Department of Fish, Wildlife & Parks, Helena, MT.
- Fedy, B. C. and C. L. Aldridge. 2011. The Importance of In-Year Repeated Counts and the Influence of Scale on Long-Term Monitoring of Sage-Grouse. *Journal of Wildlife Management* 75(5):1022–1033. doi:10.1002/jwmg.155.
- Gerrity, P. C. 2005. *Habitat Use, Diet, and Growth of Hatchery-Reared Juvenile Pallid Sturgeon and Indigenous Shovelnose Sturgeon in the Missouri River above Fort Peck Reservoir*. Master's thesis. Montana State University, Bozeman. As cited in U.S. Fish and Wildlife Service. 2013. Recovery Plan for the Pallid Sturgeon (*Scaphirhynchus albus*). Billings, MT: Northern Rockies Fish and Wildlife Conservation Office.
- Holloran, M. J. 2005. *Greater Sage-Grouse (Centrocercus urophasianus) Population Response to Natural Gas Field Development in Western Wyoming*. Doctoral dissertation. University of Wyoming, Laramie. Available: <<http://eqc.state.wy.us/orders/Land Closed Cases/11-4803 Lost Creek ISR, LLC/Exhibit 12.pdf>>.
- Jones, S. L. 2010. *Sprague's Pipit (Anthus spragueii) Conservation Plan*. Final. Denver, CO.

- Keenlyne, K. D. 1995. Recent North American Studies on Pallid Sturgeon, *Scaphirhynchus albus* (Forbes and Richardson) in A.D. Gershanovich and T. I. J. Smith, (ed). Proceedings of the International Symposium on Sturgeons, September 6-11, 1993. VNIRO Publication. Moscow, Russia. As cited in U.S. Fish and Wildlife Service. 2013. *Recovery Plan for the Pallid Sturgeon* (*Scaphirhynchus albus*). Billings, MT: Northern Rockies Fish and Wildlife Conservation Office.
- Knowles, C. J., C. J. Stoner, and S. P. Gieb. 1982. Selective Use of Black-Tailed Prairie Dog Towns by Mountain Plovers. *Condor* 84:71–74.
- Lyon, A. G. and S. H. Anderson. 2003. Potential Gas Development Impacts on Sage Grouse Nest Initiation and Movement. *Wildlife Society Bulletin* 31(2):486–491.
- Meyer, R. 2009. *Vulpes velox*. Available: <<http://www.fs.fed.us/database/feis/animals/mammal/vuvel/all.html>>. Accessed: October 22, 2013.
- Miller, B., R. Reading, J. Hoogland, T. Clark, G. Ceballos, R. List, ... D. Uresk. 2000. The Role of Prairie Dogs as a Keystone Species: Response to Stapp. *Conservation Biology* 14(1):318–321. doi:10.1046/j.1523-1739.2000.99201.x.
- Miller, S. D. and J. F. Cully Jr. 2001. Conservation of Black-Tailed Prairie Dogs (*Cynomys ludovicianus*). *Journal of Mammalogy* 82(4):889–893. doi:10.1644/1545-1542(2001)082<0889.
- Montana Fish, Wildlife & Parks. 1997. State of Montana, Fish Hatchery System Review. Prepared by Piper Technology, for Montana Fish Wildlife & Parks, Helena, MT.
- Montana Fish, Wildlife & Parks. 2012. *Montana Fish Distribution – Streams*. GIS data set of fish species distribution based on presence absence surveys conducted in the study area between 2005 and 2012. Last revised: 2012. Available: <<http://fwp.mt.gov/doingBusiness/reference/gisData/dataDownload.html>>. Accessed: April 2013.
- Montana Fish, Wildlife & Parks. 2013. *Sage-Grouse AHM Lek Results From Spring 2013*. Interoffice memorandum.
- Montana Natural Heritage Program. 2009. *Predicted Suitable Habitat Models for Selected Montana Plant and Animal Species*. Available: <http://mtnhp.org/models/>
- Montana Natural Heritage Program. 2012. *Habitat Modeling for Sprague's Pipit in Montana*. Presentation to USFWS and other Federal and State Agencies on April 10, 2012. Helena, MT.
- Montana Natural Heritage Program. 2013a. *Tongue\_River\_Railroad\_SOC*. [ArcMap geodatabase file]. Helena, MT: Montana State Library.



- Montana Natural Heritage Program. 2013b. *Big\_Horn\_SOC*. [ArcMap geodatabase file]. Helena, MT: Montana State Library.
- Montana Natural Heritage Program. 2013. *Montana Land Cover Framework*. Available: [http://apps.msl.mt.gov/Geographic\\_Information/Data/DataList/datalist\\_Details.aspx?did=%7BCE726CC6-ABF0-46ED-9DCD-3DAC02644E63%7D](http://apps.msl.mt.gov/Geographic_Information/Data/DataList/datalist_Details.aspx?did=%7BCE726CC6-ABF0-46ED-9DCD-3DAC02644E63%7D).
- Montana Natural Heritage Program. 2014. *Plant Species of Concern Report*. Available: <http://mtnhp.org/speciesofconcern/?AorP=p>
- Montana Natural Heritage Program and Montana Fish, Wildlife & Parks. n.d.-a. *Sprague's pipit* - *Anthus spragueii*. *Montana Field Guide*. Available: [http://fieldguide.mt.gov/detail\\_ABPBM02060.aspx](http://fieldguide.mt.gov/detail_ABPBM02060.aspx). Accessed: October 21, 2013.
- Montana Natural Heritage Program and Montana Fish Wildlife & Parks. n.d.-b. *Swift fox* - *Vulpes velox*. *Montana Field Guide*. Available: [http://fieldguide.mt.gov/detail\\_AMAJA03030.aspx](http://fieldguide.mt.gov/detail_AMAJA03030.aspx). Accessed: October 2, 2013.
- Montana Natural Heritage Program and Montana Fish, Wildlife & Parks. n.d.-c. *Fringed myotis* - *Myotis thysanodes*. *Montana Field Guide*. Available: [http://fieldguide.mt.gov/detail\\_AMACC01090.aspx](http://fieldguide.mt.gov/detail_AMACC01090.aspx). Accessed: October 31, 2013.
- Montana Natural Heritage Program and Montana Fish, Wildlife & Parks. n.d.-d. *Townsend's big-eared bat* - *Corynorhinus townsendii*. *Montana Field Guide*. Available: [http://fieldguide.mt.gov/detail\\_AMACC08010.aspx](http://fieldguide.mt.gov/detail_AMACC08010.aspx) Accessed: October 31, 2013.
- Montana Natural Heritage Program and Montana Fish, Wildlife & Parks. n.d.-e. *Montana Field Guide*. Available: <http://fieldguide.mt.gov/detail> Accessed: October 31, 2013.
- Montana Prairie Dog Working Group. 2002. *Conservation Plan for Black-Tailed and White-Tailed Prairie Dogs in Montana*. Final. Prepared for Montana Fish, Wildlife & Parks, Helena, MT.
- Montana Sage-Grouse Work Group. 2005. *Management Plan and Conservation Strategies for Sage Grouse in Montana - Final*. Prepared for Montana Fish, Wildlife & Parks, Helena, MT.
- Montana's Greater Sage-Grouse Habitat Conservation Advisory Council. 2014. *Greater Sage-Grouse Habitat Conservation Strategy*. January 29. Available: [http://governor.mt.gov/docs/GRSG%20strategy%2029Jan\\_final.pdf](http://governor.mt.gov/docs/GRSG%20strategy%2029Jan_final.pdf). Accessed: May 1, 2014.
- Nistler, C. M. 2009. *A Review of Prairie Dog Population Demographics and Implications for Management in Montana*. Final. Prepared for Montana Fish, Wildlife & Parks, Helena, MT.
- Sharps, J. C. and D. W. Uresk. 1990. Ecological Review of Black-Tailed Prairie Dogs and Associated Species in Western South Dakota. *Great Basin Naturalist* 50(4):339–345.

- Smith, G. A. and M. V. Lomolino. 2004. Black-Tailed Prairie Dogs and the Structure of Avian Communities on the Shortgrass Plains. *Oecologia* 138:592–602.
- Thunderbird Wildlife Consulting Inc. 2005. *Tongue River III Project September 2005 Black-Footed Ferret Surveys Fort Keogh Livestock and Range Research Station*. Final. Gillette, WY. Prepared for CirclePoint, San Francisco, CA.
- U.S. Fish and Wildlife Service. 2012. *ATTN: Environmental Filing, Docket No. FD 30186*. Scoping Letter. Helena, MT. Prepared for Surface Transportation Board, Washington, D.C.
- U.S. Fish and Wildlife Service. 1989. *Black-Footed Ferret Survey Guidelines for Compliance with the Endangered Species Act*. Last revised: 2003. Available: <[http://www.fws.gov/montanafieldoffice/Endangered\\_Species/Survey\\_Guidelines/Ferret\\_Survey\\_Guidelines.pdf](http://www.fws.gov/montanafieldoffice/Endangered_Species/Survey_Guidelines/Ferret_Survey_Guidelines.pdf)>. Accessed: September 9, 2013.
- U.S. Fish and Wildlife Service. 1990. *Recovery Plan for the Interior Population of the Least Tern* (*Sterna antillarum*). Final. Twin Cities, MN.
- U.S. Fish and Wildlife Service. 2009. Montana State Grant Application to U.S. Fish and Wildlife Service, for Statewide Fish Hatchery Operations and Maintenance. Grant No. F-51-D-21, Amendment 6.
- U.S. Fish and Wildlife Service. 2012. *Whooping Crane* (*Grus americana*) *5-Year Review: Summary and Evaluation*. Final. Prepared by Aransas National Wildlife Refuge and Corpus Christi Ecological Service Field Office.
- U.S. Fish and Wildlife Service. 2014. *Revised Recovery Plan for the Pallid Sturgeon* (*Scaphirhynchus albus*). U.S. Fish and Wildlife Service, Denver, Colorado. 115 pp. Available: [http://ecos.fws.gov/docs/recovery\\_plan/Pallid%20Sturgeon%20Recovery%20Plan%20First%20Revision%20signed%20version%20012914\\_3.pdf](http://ecos.fws.gov/docs/recovery_plan/Pallid%20Sturgeon%20Recovery%20Plan%20First%20Revision%20signed%20version%20012914_3.pdf). Accessed: August 13, 2014. .
- U.S. Fish and Wildlife Service. 2015. Proposal to List Northern Long-eared Bat. Available: <http://www.fws.gov/midwest/endangered/mammals/nlba/>. USFWS species range map available: <http://www.fws.gov/midwest/endangered/mammals/nlba/pdf/nlebRangeMapWithWNS150MileBuffer27Jan2015.pdf>. Accessed: February 18, 2015.
- Walker, B. L., D. E. Naugle, and K. E. Doherty. 2007. Greater Sage-Grouse Population Response to Energy Development and Habitat Loss. *Journal of Wildlife Management* 71(8):2644–2654. doi:10.2193/2006-529.
- Wildhaber, M. L., D. M. Papoulias, A. J. DeLonay, D. E. Tillet, J. L. Bryan, M. L. Annis, and J. A. Allert. 2005. Gender Identification of Shovelnose Sturgeon using Ultrasonic and Endoscopic Imagery and the Application for the Method in Pallid Sturgeon. *Journal of Fish Biology* 67:114–132.

Womack & Associates. 2007. *Tongue River Railroad Project Acoustical Study: Miles City State Fish Hatchery*. Private Report to Tongue River Railroad Company.

#### **22.8.4.1 Personal Communications**

Backes, Mike. Fisheries Manager. Montana Fish, Wildlife & Parks. Miles City, Montana. August 12, 2014—telephone communication with David Johnson of ICF International.

Roundstone, M. Wildlife Administrator. Northern Cheyenne Wildlife, Recreation and Parks. July 1, 2013—Email.

Schroeder, Melanie. May 13, 2013—Telephone call with BLM Miles City Field Office staff on establishing special-status plant species lists per the BLM protocol.

Schroeder, Melanie. April 24, 2013—Email discussion with BLM Miles City Field Office staff on establishing special-status plant species lists per the BLM protocol.

## **22.9 Water Resources**

### **22.9.1 Surface Water**

Agency for Toxic Substances and Disease Registry. 1995. *Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs)*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control.

Montana Department of Environmental Quality. 2014. *Montana 2014 Water Quality Integrated Report*. Helena, MT: Montana Department of Environmental Quality. Available: <http://deq.mt.gov/wqinfo/cwaic/reports.mcp>. Accessed: November 13, 2014.

Montana Department of Natural Resources and Conservation. 2013. *Montana Water Rights Data*. Publication date: April 15, 2013. Available: <ftp://nris.mt.gov/public/dnrc>. Accessed: February 17, 2014.

Northern Cheyenne Tribe. 2013. *Surface Water Quality Standards*. Prepared by the Northern Cheyenne Environmental Protection Department. Lame Deer, MT. Available: <http://www.cheyennenation.com/water.html>. Accessed: March 17, 2014.

Osborne, M., and K. Montague. 2005. *The Potential for Water Pollution from Railways*. Published by Construction Industry Research and Information Association (CIRIA). CIRIA 643. London. Summary and Key Findings Available: [http://www.ciria.org/service/Web\\_Site/AM/ContentManagerNet/ContentDisplay.aspx?Section=Web\\_Site&ContentID=8975](http://www.ciria.org/service/Web_Site/AM/ContentManagerNet/ContentDisplay.aspx?Section=Web_Site&ContentID=8975). Accessed: October 7, 2013.

U.S. Department of Agriculture. 2009. *2007 Census of Agriculture, Watersheds, Volume 2, Subject Series, Part 6*. National Agriculture Statistics Service. Washington, D.C.

Available:

[http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/Watersheds/wtrsheds.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Watersheds/wtrsheds.pdf). Accessed: March 19, 2014.

U.S. Environmental Protection Agency. 2007a. *Water Quality Assessment for the Tongue River Watershed, Montana*. Final Draft. Montana Operations Office. August.

Available:

<http://nepis.epa.gov/Exe/ZyNET.exe/P1004RB6.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000009%5CPI004RB6.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C->

[&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL](http://nepis.epa.gov/Exe/ZyNET.exe/P1004RB6.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000009%5CPI004RB6.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL).

Accessed: March 17, 2014.

U.S. Environmental Protection Agency. 2007b. *National Management Measures to Control Nonpoint Source Pollution from Hydromodification*. EPA 841-B-07-002. Office of Water. July. Washington, D.C. Available:

[http://water.epa.gov/polwaste/nps/upload/Hydromod\\_all\\_web.pdf](http://water.epa.gov/polwaste/nps/upload/Hydromod_all_web.pdf). Accessed: March 20, 2014.

U.S. Environmental Protection Agency and Montana Department of Environmental Quality. 2003. *Total Maximum Daily Load (TMDL) Status Report for the Tongue River*. Prepared for the Montana Department of Environmental Quality by Tetra Tech, Inc. March 14, 2003.

U.S. Geological Survey. 2009. *Estimated Use of Water in the United States in 2005: U.S. Geological Survey Circular 1344*. Available:

<http://water.usgs.gov/watuse/data/2005/>. Accessed: March 17, 2014.

U.S. Geological Survey. 2011. *National Hydrography Dataset. Custer, Rosebud, Powder River, and Big Horn Counties, MT*. Washington, D.C.

U.S. Geological Survey. 2014. *Average Annual Discharge (cfs) for USGS Stream Gage 06295259 Rosebud Creek near Colstrip MT; 06307500 Tongue River at Tongue R Dam nr Decker MT; 06308500 Tongue River at Miles City MT; 06296003 Rosebud Creek at mouth near Rosebud MT; 06309000 Yellowstone River at Miles City MT*. Available: <http://waterdata.usgs.gov/usa/nwis/rt>. Accessed: March 21, 2014.

Washington State Department of Ecology. Undated. Channel Migration Assessment: Appendix A. Available:

[http://www.ecy.wa.gov/programs/sea/sma/cma/page17\\_appendix.html](http://www.ecy.wa.gov/programs/sea/sma/cma/page17_appendix.html) Accessed: November 17, 2014.

Wilkomirski, B., B. Sudnik-Wojcikowska, H. Galera, M. Wierzbicka, and M. Malawska. 2011. Railway Transportation as a Serious Source of Organic and Inorganic Pollution. *Water, Air, & Soil Pollution* 218(1–4):333–345.

## 22.9.2 Groundwater

Heath, R.C. 1983. *Basic Groundwater Hydrology*. U.S. Geological Survey water-supply paper 2220. 86 pgs. Reston, VA. Available: <http://pubs.usgs.gov/wsp/2220/report.pdf>. Accessed: February 3, 2014.

Heath, R.C. 1984. *Groundwater Regions of the United States*. U.S. Geological Survey water-supply paper 2242. 78 pgs. Washington, DC. Available: <http://pubs.usgs.gov/wsp/wsp2242/pdf/wsp2242.pdf>. Accessed: February 3, 2014.

Kenny, J.F., N.L. Barber, S.S. Hutson, K.S. Linsey, J.K. Lovelace, and M.A. Maupin. 2009. *Estimated Use of Water in the United States in 2005*. U.S. Geological Survey Circular 1344. 52 pgs. Reston, VA. Available: <http://pubs.usgs.gov/circ/1344/pdf/c1344.pdf>. Accessed: February 3, 2014. Montana Bureau of Mines and Geology. 2013. *Groundwater Information Center Water Well Data*. Publication date: October 23, 2013. Available: <ftp://geoinfo.msl.mt.gov/Data/Spatial/NonMSDI/Shapefiles/gwicwells.zip>. Accessed: January 16, 2014.

Montana Bureau of Mines and Geology. 2014. *Groundwater Information Center*. County-wide statistics for Big Horn, Custer, Powder River, and Rosebud Counties. Available: <http://mbmgwic.mtech.edu/>. Accessed: February 10, 2014.

Montana Department of Environmental Quality. 2003. *Total Maximum Daily Load (TMDL) Status Report. Tongue River TMDL Planning Area*. Prepared by Tetra Tech, Inc. March. Available: [http://deq.mt.gov/CoalBedMethane/pdf/PowderRiverTMDLStatusReport\(3-14-03\).pdf](http://deq.mt.gov/CoalBedMethane/pdf/PowderRiverTMDLStatusReport(3-14-03).pdf). Accessed: May 23, 2014.

Montana Department of Environmental Quality. 2012. *Montana 2012 Final Water Quality Integrated Report*. Helena, MT.

Montana Department of Natural Resources and Conservation. 2011. *Tongue River Hydrologic Summary Report*. Tongue River Information Program. Prepared by Hydro Solutions, Inc. September.

Montana Department of Natural Resources and Conservation. 2013. *Montana Water Rights Data*. Publication date: April 15, 2013. Available: <ftp://nris.mt.gov/public/dnrc>. Accessed: February 17, 2014.

Montana State Library. 1996. *Montana Groundwater Atlas*. December. Available: <http://docs.msl.mt.gov/geoinfo/WIS/pdf/gwatlas/mtgwa.pdf>. Accessed: February 3, 2014.

U.S. Environmental Protection Agency. 2012. *Sole Source Aquifer Protection Program*. Last revised: March 6, 2012. Available: <http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/solesourceaquifer.cfm>. Accessed: May 22, 2014.

U.S. Environmental Protection Agency. 2013. *Sole Source Aquifer Program*. Region 8 website. Last revised: March 25, 2013. Available: <http://www2.epa.gov/region8/sole-source-aquifer-program>. Accessed: February 3, 2014.

## 22.9.3 Floodplains

Federal Emergency Management Agency. 1981. *Flood Insurance Rate Map for Big Horn County, Montana and Unincorporated Areas*. Panel numbers 3001431160B and 3001431170B. Effective date September 2, 1981. Available: <https://msc.fema.gov/webapp/wcs/stores/servlet/mapstore/homepage/MapSearch.html>. Accessed: March 6, 2014.

Federal Emergency Management Agency. 1997. *Flood Insurance Rate Map for Rosebud County, Montana and Unincorporated Areas*. Panel numbers 3000690041B and 3000690045B. Effective date September 1, 1997. Available: <https://msc.fema.gov/webapp/wcs/stores/servlet/mapstore/homepage/MapSearch.html>. Accessed: March 6, 2014.

Federal Emergency Management Agency. 2010. *Flood Insurance Rate Map for Custer County, Montana and Unincorporated Areas*. Panel numbers 30017C0663D and 30017C1000D. Effective date July 22, 2010. Available: <https://msc.fema.gov/webapp/wcs/stores/servlet/mapstore/homepage/MapSearch.html>. Accessed: March 6, 2014.

Montana Department of Natural Resources and Conservation. 2011. *Tongue River Hydrologic Summary Report – Tongue River Information Program*. Billings, MT. Available: [http://bogc.dnrc.mt.gov/pdf/trippdf/files/mbogc07\\_tonguer\\_hydrorpt\\_final.pdf](http://bogc.dnrc.mt.gov/pdf/trippdf/files/mbogc07_tonguer_hydrorpt_final.pdf). Accessed: February 28, 2014.

Montana Department of Natural Resources and Conservation. 2014. *Floodplain Hazard Management Regulations: 2014 Model Regulations*. Water Resources Division. Helena, MT. Available: [http://dnrc.mt.gov/wrd/water\\_op/floodplain/permitting/model\\_regulations\\_2014\\_rev.pdf](http://dnrc.mt.gov/wrd/water_op/floodplain/permitting/model_regulations_2014_rev.pdf). Accessed: April 2, 2014.

National Oceanic and Atmospheric Administration. 2013. *National Weather Service Advanced Hydrologic Prediction Service, Weather Forecast Office Billings, MT, Tongue River*. Available: <http://water.weather.gov/ahps2/glance.php?wfo=byz&gage=bnym8&riverid=203387>. Accessed: February 27, 2014.

- Natural Resources Conservation Service. Undated. *Web Soil Survey for Custer, Rosebud, Big Horn, and Powder River Counties, Montana*. U.S. Department of Agriculture. Available: <http://websoilsurvey.nrcs.usda.gov/>. Accessed: February 2014.
- Natural Resources Conservation Service. 2002. *Tongue River Stream Corridor Assessment Montana Reaches, Phase II – Physical Habitat Assessment*. U.S. Department of Agriculture. Bozeman, MT. Available: [http://montanatmdlflathead.pbworks.com/w/file/fetch/70090013/NRCS\\_2002TongueRiverCorridorAssessment.pdf](http://montanatmdlflathead.pbworks.com/w/file/fetch/70090013/NRCS_2002TongueRiverCorridorAssessment.pdf). Accessed: February 28, 2014.
- Natural Resources Conservation Service. 2013. *National Soil Survey Handbook, Part 618 Soil Properties and Qualities*. U.S. Department of Agriculture. Available: [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/?cid=nrcs142p2\\_054241](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/?cid=nrcs142p2_054241). Accessed: March 6, 2014.
- U.S. Geological Survey. 2014a. *Peak Streamflow for USGS Stream Gauge 06307740 Otter Creek at Ashland, MT*. Available: [http://nwis.waterdata.usgs.gov/nwis/peak?site\\_no=06307740&agency\\_cd=USGS&format=html](http://nwis.waterdata.usgs.gov/nwis/peak?site_no=06307740&agency_cd=USGS&format=html). Accessed: March 6, 2014.
- U.S. Geological Survey. 2014b. *Peak Streamflow for USGS Stream Gauge 06295259 Rosebud Creek near Colstrip, MT*. Available: [http://nwis.waterdata.usgs.gov/nwis/peak?site\\_no=06295250&agency\\_cd=USGS&format=html](http://nwis.waterdata.usgs.gov/nwis/peak?site_no=06295250&agency_cd=USGS&format=html). Accessed: March 6, 2014.

## 22.9.4 Wetlands

- Agency for Toxic Substances and Disease Registry. 1995. *Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs)*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control.
- Berglund, J. and R. McEldowney. 2008. *MDT Montana Wetland Assessment Method*. Prepared for Montana Department of Transportation. Helena, MT: Post, Buckley, Schuh & Jernigan.
- Cheng, S. 2003. Effects of Heavy Metals on Plants and Resistance Mechanisms. *Environmental Science and Pollution Research* 10 (4):256–264. Available: <http://ir.ihb.ac.cn/bitstream/152342/9680/1/Effects%20of%20heavy%20metals%20on%20plants%20and%20resistance%20mechanisms.pdf>. Accessed: October 8, 2013.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Washington, DC: Office of Biological Services, U.S. Fish and Wildlife Service.

- Liu, H., D. Weisman, Y-B. Ye, B. Cui, Y-H. Huang, A. Colon-Carmona, Z-H. Wang. 2009. An Oxidative Stress Response to Polycyclic Aromatic Hydrocarbon Exposure is Rapid and Complex in *Arabidopsis thaliana*. *Plant Science* 176(3):375–382.
- Montana Natural Heritage Program. 2013a. Online Guide to National Wetlands Inventory Types and Functions: Palustrine System Scrub-Shrub Wetland Class (PSS). Available: <http://mtnhp.org/nwi/PSS.asp>. Accessed: October 10, 2013.
- Montana Natural Heritage Program. 2013b. Online Guide to National Wetlands Inventory Types and Functions: Palustrine System Unconsolidated Bottom Class (PUB), Aquatic Bed Class (PAB). Available: [http://mtnhp.org/nwi/PUB\\_PAB.asp](http://mtnhp.org/nwi/PUB_PAB.asp). Accessed: October 10, 2013.
- Osborne, M. and K. Montague. 2005. *The Potential for Water Pollution from Railways*. Published by Construction Industry Research and Information Association (CIRIA). CIRIA 643. London. Summary and Key Findings Available: [http://www.ciria.org/service/Web\\_Site/AM/ContentManagerNet/ContentDisplay.aspx?Section=Web\\_Site&ContentID=8975](http://www.ciria.org/service/Web_Site/AM/ContentManagerNet/ContentDisplay.aspx?Section=Web_Site&ContentID=8975). Accessed: October 7, 2013.
- Simonich, S. L. and R. A. Hites. 1994. Vegetation-Atmospheric Partitioning of Polycyclic Aromatic Hydrocarbons. *Environmental Science and Technology* 28(5):939–943.
- Smith, R. D., A. Ammann, C. Bartoldus, and M. M. Brinson. 1995. *An Approach for Assessing Wetland Functions Using Hydrogeomorphic Classification, Reference Wetlands, and Functional Indices*. Wetlands Research Program Technical Report WRP-DE-9. Vicksburg, MS: U.S. Army Corps of Engineers Waterways Experiment Station.
- U. S. Army Corps of Engineers. 1999. *The Highway Methodology Workbook Supplement: Wetland Functions and Values – A Descriptive Approach*. NAEPP-360-1-30a. U.S. Army Corps of Engineers New England Division.
- U. S. Environmental Protection Agency. 1997. *Urbanization and Streams: Studies of Hydrologic Impacts*. Office of Water, EPA 841-R-97-009. Available: [http://ceds.org/audit/Urbanization\\_and\\_Streams-Studies\\_of\\_Hydrologic\\_Impacts.pdf](http://ceds.org/audit/Urbanization_and_Streams-Studies_of_Hydrologic_Impacts.pdf).
- Wilkomirski, B., B. Sudnik-Wojcikowska, H. Galera, M. Wierzbicka, and M. Malawska. 2011. Railway Transportation as a Serious Source of Organic and Inorganic Pollution. *Water, Air, & Soil Pollution* 218(1–4):333–345.

#### **22.9.4.1 Personal Communications**

- Berglund, Jeff. Biologist. U.S. Fish and Wildlife Service, Montana Ecological Services Field Office. May 10, 2013— Teleconference with ICF wetland biologists Dave Johnson and Matt Kuziinsky.



Tillinger, Todd. State Program Manager. U.S. Army Corps of Engineers, Helena, Montana. May 9, 2013—Teleconference with ICF wetland biologists Dave Johnson and Matt Kuziinsky.

## 22.10 Visual Resources

Bureau of Land Management. 2013. *Miles City Field Office Draft Resource Management Plan and Environmental Impact Statement*. Miles City, MT. February.

Bureau of Land Management. 2015a. *National Conservation Lands*. Last updated: August 9, 2013. Available: [http://www.blm.gov/mt/st/en/prog/blm\\_special\\_areas.html](http://www.blm.gov/mt/st/en/prog/blm_special_areas.html). Accessed: February 17, 2015.

Bureau of Land Management. 2015b. *Lewis and Clark National Historic Trail*. Last updated: August 9, 2013. Available: [http://www.blm.gov/mt/st/en/prog/blm\\_special\\_areas/lcnht.html](http://www.blm.gov/mt/st/en/prog/blm_special_areas/lcnht.html). Accessed: February 17, 2015.

City of Colstrip. 2013. *City of Colstrip Comprehensive Growth Policy 2013*. Adopted: September 24, 2013. Available: <http://www.cityofcolstrip.com/index.php/city-departments/building-and-zoning/2012-08-13-21-00-29/comprehensive-growth-policy>. Accessed: December 19, 2013.

Federal Highway Administration. 1988. *Visual Impact Assessment for Highway Projects*. (FHWA-HI-88-054.) U.S. Department of Transportation.

Litton, R. Burton, Jr. 1968. *Forest Landscape Description and Inventories – A Basis for Land Planning and Design*. U.S. Department of Agriculture Forest Service Research Paper PSW-49. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station.

Powder River County Commissioners. 2012. *Powder River County Growth Policy and Land Use Plan – 2012 Updates*. Broadus, MT. Adopted: December 28, 2012.

Sterling Codifiers, Inc. 2013. *Colstrip, Montana – City Code*. Last updated: June 11, 2013. Available: [http://www.sterlingcodifiers.com/codebook/index.php?book\\_id=831](http://www.sterlingcodifiers.com/codebook/index.php?book_id=831). Accessed: December 19, 2013.

### 22.10.1 Personal Communications

Ruchman, Jane. Landscape Architect. Developed Recreation Program Manager, Recreation Special Uses. Custer - Gallatin National Forests, Bozeman, MT. January 28, 2014—Phone conversation.

## 22.11 Cultural Resources

- Aaberg, Stephen A., Rebecca R. Hanna, Chris Crofutt, Jayme Green and Marc Vischer 2006. *Class I Overview of Paleontological and Cultural Resources in Eastern Montana*. Prepared for the Bureau of Land Management Miles City Field Office.
- Advisory Council on Historic Preservation. 2013. *Section 106 Toolkit*. Available: <http://www.achp.gov/apptoolkit.html#steps>. Accessed: November 2013.
- Anderson, Paul. N.d. *Fort Keogh Historic District National Register Nomination Form*.
- Brownell, Joan L. 2005. *A Study of Locational Information Pertinent to Northern Cheyenne Homesteads on the East Side of the Tongue River*. Prepared for Custer National Forest, Ashland District.
- Carlson, Paul H. 1998. *The Plains Indians*. Elma Dill Russell Spencer Series 19. College Station, TX: Texas A&M University Press.
- Chief Dull Knife College. 2008. *We, the Northern Cheyenne People*. Lame Deer, MT: Chief Dull Knife College.
- Council on Environmental Quality and the Advisory Council on Historic Preservation. 2013. *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*. Available: [http://www.achp.gov/docs/NEPA\\_NHPA\\_Section\\_106\\_Handbook\\_Mar2013.pdf](http://www.achp.gov/docs/NEPA_NHPA_Section_106_Handbook_Mar2013.pdf). Accessed: November 2013.
- DeMallie, Raymond J. 2001. Sioux Until 1850. In *Plains*, edited by Raymond J. DeMallie, 2:718–760. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- DeMallie, Raymond J., and David Reed Miller. 2001. Assiniboine. In *Plains*, edited by Raymond J. DeMallie, 1:572–598. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Dempsey, John H. 2001. Blackfoot. In *Plains*, edited by Raymond J. DeMallie, 1:604–628. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Dillon, Richard H. 1997. *North American Indian Wars*. Godalming, Surrey, U.K.: Bramley Books.
- Ethnoscience, Inc. In press.
- Ferguson, David. 2002. *Lee Community Historic District Determination of Eligibility*. 24RB2053.
- Ferguson, David. 2003. Updating the Powers-Yonkee Cultural History. *Archaeology in Montana* 44(2):1-47

- Fredlund, Lynn B. 1988. Distribution and Characteristics of Avonlea South of the Yellowstone River in Montana. *Avonlea Yesterday and Today: Archaeology and Prehistory*: 171–182.
- Fowler, Loretta. 2001a. Arapaho. In *Plains*, edited by Raymond J. DeMallie, 2:840–862. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Fowler, Loretta. 2001b. History of the United States Plains Since 1850. In *Plains*, edited by Raymond J. DeMallie, 1:280–299. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Fowler, Loretta, and Regina Flannery. 2001. Gros Ventre. In *Plains*, edited by Raymond J. DeMallie, 2:677–694. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Gaw, William B. 1884. *Map of Southeastern Montana*. Courtesy of MHS Research Center.
- Greene, Jerome A. 2006. *Yellowstone Command: Colonel Nelson A. Miles and the Great Sioux War, 1876-1877*. Norman, OK: University of Oklahoma Press.
- Google, Inc. 2013. *Google Earth Professional Version 5.0*. Mountain View, CA. Available: <http://earth.google.com>.
- Greiser, Sally T., T. Weber Greiser, and Susan M. Vetter. 2013. Middle prehistoric period adaptations and paleoenvironment in the Northwestern Plains: the Sun River site. *American Antiquity* 50 (4):849–877.
- Johnson, Ann M. 1977. The Dune Buggy Site 24RV1, and Northwestern Plains Ceramics. *Plains Anthropologist* 22 (75):37–49.
- Kornfield, Marcel, George C. Frison, and Mary Lou Larson. 2010. *Prehistoric Hunter-Gatherers of the High Plains and Rockies*. 3rd ed. Walnut Creek, CA: Left Coast Press, Inc.
- Lehmer, Donald J. 2001. Plains Village Tradition: Postcontact. In *Plains*, edited by Raymond J. DeMallie, 1:245–255. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- MacDonald, Douglas H. 2012. *Montana Before History: 11,000 Years of Hunter-Gatherers in the Rockies and Great Plains*. Missoula, MT: Mountain Press Publishing Company, Inc.
- McDaniel, Susan R. and Dena L. Sanford. 1989. *Main Street Historic District (Miles City) National Register Registration Form*. 24CR701.
- Montana Preservation Alliance. 2007. *Cultural Landscape of the Upper Tongue River Valley in Rosebud County, Montana*. Prepared for National Center for Preservation Technology and Training.

- Moore, John H., Margot P. Liberty, and A. Terry Straus. 2001. Cheyenne. In *Plains*, edited by Raymond J. DeMallie, 2:863–887. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Parks, Douglas R. 2001. Arikara. In *Plains*, edited by Raymond J. DeMallie, 1:365–390. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Renewable Technologies, Inc. 2006. *Cultural Landscape-Scale Overview of the High Potential Coal Bed Natural Gas Development Area (North Powder River Basin Southeast Montana)*. Prepared for Bureau of Land Management.
- Stands in Timber, John, and Margot Liberty. 1967 [1998]. *Cheyenne Memories*. 2nd ed. New Haven and London: Yale University Press.
- Stewart, Frank Henderson. 2001. Hidatsa. In *Plains*, edited by Raymond J. DeMallie, 1:329–348. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Swagerty, William R. 2001. History of the United States Plains Until 1850. In *Plains*, edited by Raymond J. DeMallie, 1:256–279. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Tallbull, Bill, and Sherri Deaver. 1991. *Potential Cultural Effects to the Northern Cheyenne from the Proposed Tongue River Railroad Extension*. June. Prepared for the Interstate Commerce Commission.
- Taylor, Jeb 2006. *Projectile Points of the High Plains: New Perspectives on Typology Based on Examinations of Original Type Site Specimens*. Jeb Taylor Artifacts, Buffalo, WY.
- Treaty of Fort Laramie with Sioux, Etc., 1851. 1851. 11 Stat. 749. Available, <http://digital.library.okstate.edu/kappler/vol2/treaties/sio0594.htm>. Accessed: October 24, 2013.
- Treaty with the Sioux - Brulé, Oglala, Miniconjou, Yanktonai, Hunkpapa, Blackfeet, Cuthead, Two Kettle, Sans Arcs, and Santee - and Arapaho, 1868. 1869. 15 Stat. 635. Available, <http://digital.library.okstate.edu/kappler/vol2/treaties/sio0998.htm>. Accessed: October 24, 2013.
- Voget, Fred W. 2001. Crow. In *Plains*, edited by Raymond J. DeMallie, 2:695–717. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.
- Walter, Glenn. 1996. An Analysis of Prehistoric Land Use Patterns in the Tongue River Valley, North of Decker, Montana. Unpublished M.A. Thesis in Anthropology, University of Montana, Missoula.
- Wood, W., Raymond and Lee Irwin. 2001. Mandan. In *Plains*, edited by Raymond J. DeMallie, 1:349–364. Handbook of North American Indians 13. Washington, D.C.: Smithsonian Institution.

## 22.12 Land Resources

### 22.12.1 Land Use

- Big Horn County. 2014. *Big Horn County Draft Growth Plan*. Big Horn County, MT. Available: <http://www.beartooth.org/BHC-2014.pdf>. Accessed: January 13, 2014.
- Bureau of Land Management. 2013. Miles City Field Office Draft Resource Management Plan and Environmental Impact Statement. Miles City, MT. Available: [http://www.blm.gov/mt/st/en/fo/miles\\_city\\_field\\_office/rmp/draft\\_rmp.html](http://www.blm.gov/mt/st/en/fo/miles_city_field_office/rmp/draft_rmp.html). Accessed: January 12, 2014.
- Bureau of Land Management. 2011. *Briefing Statement, Subject: Pumpkin Creek Ranch and Recreation Area*. BLM-Montana/Dakotas: Miles City Field Office. August 11. Available: [http://www.blm.gov/pgdata/etc/medialib/blm/mt/blm\\_information/bps.Par.87886.File.tmp/PumpkinCreek.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/mt/blm_information/bps.Par.87886.File.tmp/PumpkinCreek.pdf). Accessed: March 24, 2014.
- Bureau of Land Management. 1997. *Standards for Rangeland Health and Guidelines for Livestock Management Final Environmental Impact Statement*. Montana Field office. May.
- California Department of Forestry and Fire Protection, Bureau of Land Management, Union Pacific, Burlington Northern Santa Fe, and U.S. Forest Service. 1999. *Railroad Fire Prevention Field Guide*. Available: <http://osfm.fire.ca.gov/codedevelopment/pdf/firesafetyplanning/rroperations/rrfirepreventionguide.pdf>. Accessed: April 1, 2014.
- City of Colstrip. 2008. *Comprehensive Growth Policy*. Colstrip, MT. Available: City of Colstrip Comprehensive Growth Policy. Accessed: January 3, 2014
- Miles City—Custer County. 2008. *Growth Policy Miles City-Custer County*. Resolution No. 3208. City-County Planning Board. Miles City, MT. Available: <http://milescity-mt.org/wp-content/uploads/2012/11/Growth-Policy.pdf>. Accessed: January 3, 2014.
- Montana Bureau of Mines and Geology. 2013. *Montana Groundwater Information Center Water Well Data*. October 23. Available: <ftp://geoinfo.msl.mt.gov/Data/Spatial/NonMSDI/Shapefiles/gwicwells.zip>. Accessed: January 16, 2014.
- Montana Department of Military Affairs Disaster and Emergency Services. 2010. *2010 Update to the State of Montana Multi-Hazard Mitigation Plan and Statewide Hazard Assessment*. November. Available: <http://montanadma.org/montana-mitigation-plan>. Accessed: January 23, 2014.
- Montana Department of Natural Resources and Conservation. 2013. Trust Land Management Division. *Fiscal Year 2013 Annual Report*. Available:

<http://dnrc.mt.gov/Trust/PDFs/DNRC%20Annual%20Report%202014%20WEB.pdf>.  
Accessed: January 17, 2014.

Montana Department of Natural Resources and Conservation. 2007. *Tongue River Ranch Recreational Use Plan*. April. Available:  
<http://dnrc.mt.gov/Trust/LandBanking/Acquisition/TongueRiverTravelMgmtPlan.pdf>.  
Accessed: January 14, 2014.

Montana Department of Revenue. 2013. *Revenue Final Land Unit (FLU) Classification*. Montana State Library. Last revised: December 13, 2013. Available:  
[http://apps.msl.mt.gov/Geographic\\_Information/Data/DataList/datalist\\_MetadataDetail.aspx?did={4754A734-303D-4920-8CAA-F027D5F3EE58}](http://apps.msl.mt.gov/Geographic_Information/Data/DataList/datalist_MetadataDetail.aspx?did={4754A734-303D-4920-8CAA-F027D5F3EE58}). Accessed: January 15, 2014.

Montana Department of Revenue. 2014. *Montana Cadastral Framework*. Montana State Library. Last revised: January 7, 2014. Available:  
<http://gisportal.msl.mt.gov/geoportal/catalog/search/resource/details.page?uuid=%7B35524afc-669b-4614-9f44-43506ae21a1d%7D>. Accessed: January 15, 2014.

Montana Fish, Wildlife, and Parks. 2001. *Bice/Hirsch Ranch Conservation Easement Environmental Assessment, Management Plan, Socio-Economic Assessment*. July 23.

Montana Fish, Wildlife & Parks. 2014. *Miles City Fish Hatchery*. Available:  
<http://fwp.mt.gov/fishing/hatcheries/siteDetail.html?id=283742>. Accessed: January 22, 2014.

Montana National Heritage Program. 2013. *Conservation Easement Summary by County*. Available: [http://mtnhp.org/stew/2013\\_Ease\\_Sum\\_County.pdf](http://mtnhp.org/stew/2013_Ease_Sum_County.pdf). Accessed: January 17, 2014.

Montana State Library. 2013. *Conservation Easements*. Last revised: September 3, 2013. Available: <ftp://ftp.gis.mt.gov/CadastralFramework/ConservationEasements/>. Accessed: January 17, 2014.

U.S. Department of Agriculture, Agricultural Research Service Livestock and Range Research Laboratory. 2013. *Introduction to Fort Keogh*. Last revised: August 22, 2013. Available: <http://www.ars.usda.gov/research/Docs.htm?docid=3364>. Accessed: January 17, 2014.

U.S. Department of Agriculture, Natural Resource Conservation Service. 2013. *Soil Survey Geographic (SSURGO) Data for Montana*. Available: <http://gisportal.msl.mt.gov/geoportal/catalog/search/resource/details.page?uuid=%7B812622e9-3e92-4d74-b84b-33e5b74f6a65%7D>. Accessed: March 24, 2014.

### 22.12.1.1 Personal Communications

Colton, Dawn. Community Services and Planning. City of Miles City, MT. January 21, 2014—Phone Call.

Petersen, Mark. Research Leader. U.S. Department of Agriculture Livestock and Range Research Laboratory, Miles City, MT. January 22 and May 23, 2014—Phone Call.

## 22.12.2 Recreation

Bureau of Land Management. 2005. *Pumpkin Creek Ranch Land Exchange MTM-89845 Environmental Assessment*. Bureau of Land Management Miles City Field Office. Available:  
[http://www.blm.gov/pgdata/etc/medialib/blm/mt/field\\_offices/miles\\_city/pumpkin\\_lx.Par.41499.File.dat/EA.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/miles_city/pumpkin_lx.Par.41499.File.dat/EA.pdf). Accessed: January 25, 2014.

Bureau of Land Management. 2011. *BLM State Director Visits Local Recreation Area*. November 14. Available:  
<http://www.blm.gov/mt/st/en/info/newsroom/2011/november/pumpkincreek.html>. Accessed: January 26, 2014.

Bureau of Land Management. 2012. *BLM Manual 6330- Management of BLM Wilderness Study Areas*. Available:  
[http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information\\_Resources\\_Management/policy/blm\\_manual.Par.31915.File.dat/6330.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_manual.Par.31915.File.dat/6330.pdf). Accessed: February 25, 2014.

Fischer, H. and C. Fischer. 2008. *Paddling Montana: a Falcon Guide*. 2nd Edition. Morris Book Publishing, LLC.

Knight, James E. 2004. *Conservation Easements on Montana Ranches*. Montana State University Extension Service Montguide. April. Available:  
<http://msuextension.org/publications/AgandNaturalResources/MT199618AG.pdf>. Accessed: January 27, 2014.

Miles City–Custer County. 2008. *Growth Policy Miles City-Custer County. Resolution No. 3208*. City-County Planning Board. Miles City, MT. Available: <http://miles-city-mt.org/wp-content/uploads/2012/11/Growth-Policy.pdf>. Accessed: January 3, 2014.

Montana Fish, Wildlife & Parks. 2001. *Bice/Hirsch Ranches Conservation Easement Environmental Assessment Management Plan*. Available:  
<https://ia600307.us.archive.org/22/items/bice2001hirschranchemontrich/bice2001hirschranchemontrich.pdf>. Accessed: January 31, 2014.

Montana Fish, Wildlife & Parks. 2008. *Montana Statewide Comprehensive Outdoor Recreation Plan*. January. Available: <http://fwp.mt.gov/recreation/management/>. Accessed: January 17, 2014.

Montana Fish, Wildlife & Parks. 2012. *Public Access on Fort Keogh – A Unique Opportunity*. October 22, 2012. Available:  
[http://fwp.mt.gov/news/newsReleases/hunting/nr\\_1844.html](http://fwp.mt.gov/news/newsReleases/hunting/nr_1844.html). Accessed: January 26, 2014.

- Montana Fish, Wildlife & Parks. 2013a. *Montana's Fishing Access Sites Field Guide*. Available: <http://fwp.mt.gov/fishing/guide/fasGuide.html>. Accessed: January 31, 2014.
- Montana Fish, Wildlife & Parks. 2013b. *Comments on the Proposed Tongue River Railroad Project's Draft Scope of Study*. Last updated: January 11, 2013. Available: [http://www.tonguerivereis.com/public\\_comments\\_agencies.html](http://www.tonguerivereis.com/public_comments_agencies.html). Accessed: January 26, 2014.
- Montana Fish, Wildlife & Parks. 2014c. *Detailed Waterbody Report, Tongue River*. Available: <http://fwp.mt.gov/fishing/guide/waterbodyDetail.html?llid=1058677464097>. Accessed: February 5, 2014.
- Montana Fish, Wildlife & Parks. 2014d. *Detailed Waterbody Report, Spotted Eagle Lake*. Available: <http://fwp.mt.gov/fishing/guide/waterbodyDetail.html?llid=1058545463909>. Accessed: February 5, 2014.
- Montana Fish, Wildlife & Parks. 2014e. *Detailed Waterbody Report, Tongue River Reservoir*. Available: <http://fwp.mt.gov/fishing/guide/waterbodyDetail.html?llid=1068000450836>. Accessed: February 5, 2014.
- Montana Natural Resources and Conservation. 2007. *Tongue River Ranch Recreational Use Plan*. Available: <http://dnrc.mt.gov/Trust/LandBanking/Acquisition/TongueRiverTravelMgmtPlan.pdf>. Accessed: January 17, 2014.
- Phillips, R. L., D. E. Biggins, and A. B. Hoag. 1986. *Coal Surface Mining and Selected Wildlife – A 10-year Case Study near Decker, Montana* (pp. 235–245). Proceedings II: Issues and Technology in the Manageemnt of Affected Western Wildlife. Boulder, CO.
- Polfus, J. L. 2011. *Literature Review and Synthesis on the Effects of Residential Development on Ungulate Winter Range in the Rocky Mountain West*. Helena, MT: Montana Fish, Wildlife, and Parks.
- State of Montana. 2014. *Official State Travel Site, Tongue River Reservoir State Park*. Available: [http://visitmt.com/listing/categories\\_NET/MoreInfo.aspx?IDRRecordID=3110&siteid=90](http://visitmt.com/listing/categories_NET/MoreInfo.aspx?IDRRecordID=3110&siteid=90). Accessed: January 26, 2014.
- U.S. Department of Agriculture. 2014. *Welcome to Fort Keogh Livestock and Range Research Laboratory*. Available: <http://www.ars.usda.gov/Main/docs.htm?docid=3087>. Accessed: February 13, 2014.
- U.S. Forest Service. 2014a. *Recreation Overview/Background*. Available: <http://www.fs.usda.gov/generalinfo/custer/recreation/generalinfo/?groupid=96149&recid=60817>. Accessed: January 25, 2014.



U.S. Forest Service. 2014b. *Ashland Ranger District Day Hiking Areas*. Available: <http://www.fs.usda.gov/activity/custer/recreation/hiking/?recid=60817&actid=50>. Accessed: February 13, 2014.

### **22.12.2.1 Personal Communications**

Muscha, Travis. Region 7 Hunting Access Enhancement Coordinator. Montana Fish, Wildlife & Parks. January 27, 2014 and January 23, 2014—Email and telephone conversations including GIS file transmittals.

Petersen, Mark. Research Leader. U.S. Department of Agriculture Livestock and Range Research Laboratory, Miles City, MT. May 23, 2014—Phone Call.

### **22.12.3 Section 4(f) and 6(f) Resources**

No references

### **22.12.4 Hazardous Waste Sites**

U.S. Environmental Protection Agency. 2013. *Wastes – Hazardous Waste*. Last Updated: April 8, 2013. Available: <<http://www.epa.gov/osw/hazard/index.htm>>. Accessed: January 27, 2014.

## **22.13 Geology, Soils, and Paleontological Resources**

### **22.13.1 Geology and Soils**

Brown, J. L. 1993. Sedimentology and Depositional History of the Lower Paleocene Tullock Member of the Fort Union Formation, Powder River Basin, Wyoming and Montana. *U.S. Geological Survey Bulletin 1917*.

Bureau of Land Management. 2009. *Final EIS, South Gillette Area Coal Lease Applications*. August.

Montana Bureau of Mines and Geology. 2014. *Seismicity in Montana*. Available: <http://mbmgquake.mtech.edu/montanaseismicity.html>. Accessed: February 10, 2014.

Montana Department of Natural Resources and Conservation and Federal Emergency Management Agency. 2005. *Probabilistic Earthquake Ground Shaking Maps for the State of Montana, Plates 5 and 14*. Available: [http://dnrc.mt.gov/wrd/water\\_op/dam\\_safety/technical\\_ref/seismic\\_maps/](http://dnrc.mt.gov/wrd/water_op/dam_safety/technical_ref/seismic_maps/). Accessed: February 10, 2014.

- Natural Resources Conservation Service. No date. *U.S. General Soil Map (STATSGO2) for the State of Montana*. Available:  
<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed: February 1, 2014.
- Natural Resources Conservation Service. 2014a. Description of STATSGO2 Database. Available:  
[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053629](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053629). Accessed: April 23, 2014.
- Natural Resources Conservation Service. 2014b. National Soil Survey Handbook Part 618 (Subpart A). Available:  
[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/research/?cid=nrcs142p2\\_054223](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/research/?cid=nrcs142p2_054223). Accessed: April 23, 2014
- Natural Resources Conservation Service. 2014c. *Soil Series Name Search Query Facility*. Available: <https://soilseries.sc.egov.usda.gov/osdnamequery.asp>. Accessed: March 19, 2014.
- U.S. Department of Agriculture. 1987. *Soil Mechanics Level I Module 2 AASHTO – (American Association of State Highway and Transportation Officials) Study Guide*. Revised: February. Available:  
<ftp://ftp.wcc.nrcs.usda.gov/wntsc/H%26H/training/soilsOther/soil-AASHTO.pdf>. Accessed: February 11, 2014.
- U.S. Department of Agriculture. 2014a. *Montana Guide: Linear Extensibility Percent (LEP) Soil Limitation Rating for Shrink-Swell Behavior*. Available:  
[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mt/soils/?cid=nrcs144p2\\_057359](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mt/soils/?cid=nrcs144p2_057359). Accessed: February 11, 2014.
- U.S. Department of Agriculture. 2014b. *Soil Sodium Testing*. Available:  
[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mt/about/?cid=nrcs144p2\\_057680](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mt/about/?cid=nrcs144p2_057680). Accessed: February 11, 2014.
- U.S. Department of Agriculture. 2014c. *Soil Survey Manual, Chapter Three: Examination and Description of Soils*. Available:  
[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_054253](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_054253). Accessed: February 11, 2014.
- U.S. Department of Agriculture. 2014d. *U.S. General Soil Map (STATSGO2)*. Available:  
<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed: February 11, 2014.
- U.S. Department of Agriculture and National Resource Conservation Service. 1996. *Soil Survey of Rosebud County and Part of Big Horn County, Montana*. In cooperation with Montana Agricultural Experiment Station. October.

U.S. Geological Survey. 2013. *Assessment of Coal Geology, Resources, and Reserve Base in the Powder River Basin, Wyoming and Montana*. Fact Sheet 2012–3143. February 2013.

## 22.13.2 Paleontological Resources

Aaberg, Stephen A., Rebecca R. Hanna, Chris Crofutt, Jayme Green and Marc Vischer 2006. *Class I Overview of Paleontological and Cultural Resources in Eastern Montana*. Prepared for the Bureau of Land Management Miles City Field Office.

Dorf, E. 1940. Relationship between floras of type Lance and Fort Union Formations. *Geological Society of America Bulletin* 51:213–236.

Douglass, E. 1908. Vertebrate fossils from the Fort Union beds. *Annals of the Carnegie Museum* 5:11–26.

Flores, R.M. 1987. Stratigraphy and sedimentology of the Paleocene Fort Union Formation along the Powder River, Montana and Wyoming, in Beus, S.S. (ed.) *Centennial Field Guide Volume 2*.

Gingerich, P.D. 1975. New North American *Plesiadapidae* (Mammalia, Primates) and a biostratigraphic zonation of the Middle and Upper Paleocene. *Contributions from the Museum of Paleontology, University of Michigan* 24:135–148.

Gidley, J.W. 1923. Paleocene primates of the Fort Union, with discussion of the relationships of the Eocene primates. *Proceedings, U.S. National Museum*. 63.

Hanneman, D.L. and C.J. Widemann. 1991. Sequence stratigraphy of Cenozoic continental rocks, southwestern Montana. *Geological Society of America Bulletin* 103(10): 1335–1345.

Holtzman, R.C. 1976. *Late Paleocene mammals of the Tongue River Formation, North Dakota*: Ph.D. dissertation. University Minnesota.

Holtzman, R.C. and D.L. Wolberg. 1977. Microcosmodontinae and *Microcosmodon woodi*, new multituberculate taxa (Mammalia) from the Late Paleocene of North America. *Scientific Publications of the Science Museum Minnesota* 4:1–13.

Jacob, A.F. 1973. Depositional environments of Paleocene Tongue River Formation, Western North Dakota. *American Association of Petroleum Geologists* v (57):1038–1052.

Joyce, W.G., A. Revan, T.R. Lyson, and I.G. Danilov. 2009. Two new plastronine softshell turtles from the Paleocene of Montana and Wyoming. *Bulletin of the Peabody Museum of Natural History* 50(2):307–325

Knowlton, F.H. 1909. The Stratigraphic Relations and Paleontology of the "Hell Creek Beds," "Ceratops Beds" and Equivalents, and Their Reference to the Fort Union Formation. *Proceeding of the Washington Academy of Sciences* XI (3):179–238.

- Liggett, G. No date. Official Bureau of Land Management Potential Fossil Yield Classification for the Geologic Formations of Montana, North Dakota, and South Dakota. Billings, MT.
- McKenna, M.C. 1963. Primitive Paleocene and Eocene Apatemyidae (Mammalia, Insectivora) and the Primate-Insectivore Boundary. *American Museum Novitates* 2160:1-39.
- Melton, Douglas A, and Leslie B Davis. 1999 Spatial Distribution, CAMS Radiocarbon Geochronology, and Taxonomy of Fossil Bison in Montana: An Initial Approach. *Current Research in the Pleistocene* 16:130-132.
- Roberts, A.E. 1972. *Cretaceous and Early Tertiary Depositional and Tectonic History of the Livingston Area, Southwestern Montana*. In *Geology of the Livingston Area, Southwestern Montana*. U.S. Geological Survey Professional Paper 526-C C1.
- Ross, P.R., D.A. Andrews, and I.J. Witkind. 1955. Geologic map of Montana: U.S. Geological Survey. 2 sheets. Scale 1:500,000.
- Simpson, G.G. 1935b. New Paleocene Mammals from the Fort Union of Montana. *Proceedings of the U.S. National Museum* 83:221–244.
- Simpson, G.G. 1936. A New Fauna From the Fort Union of Montana. *American Museum Novitates* 873:1–27.
- Simpson, G.G. 1937a. The Fort Union of the Crazy Mountain field, Montana and its Mammalian Faunas. *U.S. National Museum Bulletin* 169:287.
- Simpson, G.G. 1937b. Additions to the Upper Paleocene fauna of the Crazy Mountain Field. *American Museum Novitates* 940:1–15.
- U.S. Bureau of Land Management. 2008. Assessment And Mitigation Of Potential Impacts To Paleontological Resources. Instruction Memorandum Number 2009-11. National Environmental Policy Act Program. Office of the Assistant Director. Renewable Resources Planning. Washington, D.C.
- Wilf, C.P., C. Labandeira, K.R. Johnson, and B. Ellis. 2006. Decoupled Plant and Insect Diversity After the End-Cretaceous Extinction. *Science* 313:1112–1115.

## Personal Communications

- Melton, Doug. Lead Archaeologist. Bureau of Land Management. Miles City, Montana. 2015a—Telephone conversation regarding comments on Draft EIS.
- Melton, Doug. Lead Archaeologist. Bureau of Land Management. Miles City, Montana. 2015b—E-mail to mark Robinson regarding mammoth and mastodon finds, 13 March 2015.

## 22.14 Energy Resources

City of Colstrip. 2013. *Colstrip Comprehensive Growth Policy 2013*. Colstrip MT. Page 28. Available: <http://www.cityofcolstrip.com/index.php/city-departments/building-and-zoning/2012-08-13-21-00-29/comprehensive-growth-policy/finish/7-building-zoning/820-colstrip-comprehensive-growth-policy-2013-update>. Accessed February 14, 2014.

Energy Information Administration. 2006. *Commercial Building Energy Consumption Survey (CBECS) 2003. Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone for Non-Mall Buildings, 2003, December 2006*. Available: [http://www.eia.gov/consumption/commercial/data/archive/cbecs/cbecs2003/detailed\\_tables\\_2003/2003set10/2003html/c20.html](http://www.eia.gov/consumption/commercial/data/archive/cbecs/cbecs2003/detailed_tables_2003/2003set10/2003html/c20.html). Accessed: February 14, 2014.

Energy Information Administration. 2014. *Monthly Energy Review January 2014: Thermal Conversion Factor Source Documentation: Approximate Heat Content of Petroleum and Natural Gas Plant Liquid*. Washington DC. Last Revised: January 2014, Available: [http://www.eia.gov/totalenergy/data/monthly/pdf/sec13\\_a\\_doc.pdf](http://www.eia.gov/totalenergy/data/monthly/pdf/sec13_a_doc.pdf). Accessed: February 14, 2014.

Federal Railroad Administration. 2009. Federal Railroad Administration Final Report Comparative Evaluation of Rail and Truck Fuel Efficiency on Competitive Corridors. November 19, 2009. Available: <http://www.fra.dot.gov/Elib/Document/2925>. Accessed: March 14, 2014.

Montana-Dakota Utilities Company. No Date. *Communities Served in Montana*. Bismarck ND. Available: <http://www.montana-dakota.com/utility-menu/about-us/communities-served>. Accessed: February 14, 2014.

Montana Department of Environmental Quality. 2014. *Administrative Amendment, Permit #2947-03, CHS, Inc. – Glendive Bulk Petroleum Terminal, March 20, 2014*. Available: [http://www.deq.mt.gov/AirQuality/ARMpermits/2947-03\\_AA.pdf](http://www.deq.mt.gov/AirQuality/ARMpermits/2947-03_AA.pdf). Accessed: March 28, 2014.

Montana Department of Environmental Quality. 2013a. *Historical Energy Statistics Table E2. Net Electric Generation by Plant and Ownership, 2006-2011 (MWh)*. <http://www.deq.mt.gov/Energy/HistoricalEnergy/default.mcp>. Accessed: May 13, 2014.

Montana Department of Environmental Quality. 2013b. *Historical Energy Statistics Table E8. Utility Revenue, Retail Sales, Consumers and Average Price per Kilowatt-hour, 2011*. <http://www.deq.mt.gov/Energy/HistoricalEnergy/default.mcp>. Accessed: May 13, 2014.

Tongue River Electric Cooperative. No Date. *Tongue River Electric Cooperative, Index*. Ashland, MT. Available: <http://www.tongueriverelectric.com/index.html>. Accessed: February 14, 2014.

## 22.15 Socioeconomics

- Amish America. 2011. *Montana Amish: Montana's Five Amish Communities Are Scattered Across the State*. Available: <http://amishamerica.com/montana-amish/>. Accessed: February 9, 2014.
- Amish Studies. 2013. *Amish Population by State 2013*. The Young Center for Anabaptist and Pietist Studies at Elizabethtown College. Available: [http://www2.etown.edu/amishstudies/Population\\_by\\_State\\_2013.asp](http://www2.etown.edu/amishstudies/Population_by_State_2013.asp). Accessed: February 9, 2014.
- Bureau of Economic Analysis. 2011. *Local Area Personal Income and Employment. Regional Economics Accounts—Previously Published Estimates*. Available: <http://www.bea.gov/regional/histdata/>. Accessed: March 3, 2014.
- Bureau of Labor Statistics. 2012. *Local Area Unemployment Statistics*. Available: <http://www.bls.gov/lau/>. Accessed: March 3, 2014.
- Bureau of Labor Statistics. 2013. *May 2012 State Occupational Employment and Wage Estimates*. Montana. Available: <http://www.bls.gov/oes/tables.htm>. Accessed: September 15, 2014.
- Bureau of Labor Statistics. 2014. *CPI Detailed Report*. January. Available: <http://www.bls.gov/cpi/cpid1401.pdf>. Accessed: March 12, 2014.
- Bureau of Land Management. 2005. *Land Use Planning Handbook*. Handbook H-1601-1. Appendix D. Available: [http://www.blm.gov/pgdata/etc/medialib/blm/wo/Planning\\_and\\_Renewable\\_Resources/planning\\_images.Par.55437.File.dat/Soc\\_Sci\\_Consideration.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Planning_and_Renewable_Resources/planning_images.Par.55437.File.dat/Soc_Sci_Consideration.pdf). Accessed: March 3, 2014.
- Custer County. 2014. *Custer County Fire Department*. Available: <http://ccsomt.com/emergency-service/fire-dept/>. Accessed: April 4, 2014.
- Duffield, J. W. 2003. *Economic Valuation Studies of Fish and Wildlife Resources in Montana*. Montana Fish, Wildlife & Parks. Available: <http://fwp.mt.gov/doingBusiness/reference/montanaChallenge/reports/ecovalues.html>. Accessed: March 3, 2014.
- FireDepartment.net. 2014. *Powder River County, MT Fire Departments*. Available: <http://firedepartment.net/directory/montana/powder-river-county>. Accessed: November 7, 2014.
- Governor's Office of Indian Affairs. 2013a. *Northern Cheyenne Reservation: Demographic and Economic Information*. Available: [http://www.ourfactsyourfuture.org/admin/uploadedPublications/2694\\_N\\_Cheyenne\\_RF08\\_web.pdf](http://www.ourfactsyourfuture.org/admin/uploadedPublications/2694_N_Cheyenne_RF08_web.pdf). Accessed: February 9, 2014.

- Governor's Office of Indian Affairs. 2013b. Crow Reservation: Demographic and Economic Information. Available:  
[http://www.ourfactsyourfuture.org/admin/uploadedPublications/2685\\_Crow\\_RF08\\_Web.pdf](http://www.ourfactsyourfuture.org/admin/uploadedPublications/2685_Crow_RF08_Web.pdf). Accessed: February 09, 2014.
- Jones, Lang, and LaSalle. 2013. Regional Impact Analysis. A Study of Energy Related Impacts on the 16 County Region Represented by the Eastern Montana Impact Coalition. Prepared for Eastern Montana Impact Coalition. Available: <http://semcdc.org/wp-content/uploads/2013/11/Eastern-MT-Impact-Coalition-Final-Report-Oct.-2013.pdf>. Accessed: 02/11/2015
- Miles City Fire Rescue. 2014. *Emergency Medical Services (EMS)*. Available:  
<http://miles-cityfirerescue.org/emergency-medical-services.html>. Accessed: April 4, 2014.
- Montana Department of Commerce. 2013. *Montana State and County Population Projections*. Census & Economic Information Center. Available:  
[http://ceic.mt.gov/Population/PopProjections\\_AllCountiesPage.aspx](http://ceic.mt.gov/Population/PopProjections_AllCountiesPage.aspx). Accessed: March 12, 2014.
- Montana Department of Revenue. 2013. *Biennial Report*. July 1, 2010–June 30, 2012. Available: [http://revenue.mt.gov/home/publications/biennial\\_reports.aspx](http://revenue.mt.gov/home/publications/biennial_reports.aspx). Accessed: March 3, 2014.
- Montana Department of Transportation. 2014. *Motor Fuel Licensing/Reporting Guidelines*. January. Available:  
[http://www.mdt.mt.gov/other/fueltax/external/manuals/motorfuels\\_guidelines.pdf](http://www.mdt.mt.gov/other/fueltax/external/manuals/motorfuels_guidelines.pdf). Accessed: March 3, 2014.
- Montana Office of Program and Planning. 2009. *Coal Severance Tax*. Available:  
[http://budget.mt.gov/content/excbudgets/2009\\_budget/13-CoalTax\\_1106.pdf](http://budget.mt.gov/content/excbudgets/2009_budget/13-CoalTax_1106.pdf). Accessed: March 3, 2014.
- Montana Office of Public Instruction. 2013. *Complete 2013- 2014 Directory of Montana Schools*. Available: <http://opi.mt.gov/Resources/Directory/Index.html>. Accessed: April 4, 2014.
- National Center for Charitable Statistics. No date. *Nonprofits by County*. Available:  
<http://nccs.urban.org/>. Accessed: February 9, 2014.
- Sirgy, M. J., R. N. Widgery, D. J. Lee, G. B. Yu. 2010. Developing a Measure of Community Well-Being Based on Perceptions of Impact in Various Life Domains. *Social Indicators Research* 96: 295–311
- Southeastern Montana Development Corporation. 2010. *Comprehensive Economic Development Strategy*. 2011-2015 Update. Available:  
[http://www.census.gov/govs/state/historical\\_data\\_2011.html](http://www.census.gov/govs/state/historical_data_2011.html). Accessed: March 3, 2014.

- State of Montana. 2013. *Comprehensive Annual Financial Report for the Year Ended June 30, 2012*. Available: <http://accounting.mt.gov/cafr/default.mcp>. Accessed: March 3, 2014.
- Tanaka, J., L. A. Torell, and N. Rimbey. 2005. Who Are Public Land Ranchers 16 and Why Are They Out There? *Western Economic Forum*. Fall 17(205), 14–20.
- Theofilou, P. 2013. Quality of Life: Definition and Measurement. Theoretical Contributions. *Europe's Journal of Psychology* 9(1): 150–162
- Tongue River Railroad Company. 2012. *Rail Construction and Operation – In Custer, Powder River and Rosebud Counties, Mt.* Revised Application for Construction and Operation Authority. October.
- Tongue River Railroad Company. 2014a. *Rail Construction and Operation – In Custer, Powder River and Rosebud Counties, MT.* Information Request #4. April.
- Tongue River Railroad Company. 2014b. *Rail Construction and Operation – In Custer, Powder River and Rosebud Counties, MT.* Supplemental Reply of Tongue River Railroad Company, Inc. to 6<sup>th</sup> Information Request. August.
- U.S. Census Bureau. 2008-2012. *American Community Survey 5-Year Estimates. 2008-2012*. B25004: Vacancy Status and DP04: Selected Housing. Available: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>. Accessed: March 3, 2014
- U.S. Census Bureau. 2010. *Decennial Census. Profile of General Population and Housing Characteristics: 2010. 2010 Demographic Profile Data*. Available: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>. Accessed: March 3, 2014.
- U.S. Census Bureau. 2011. *State and Local Government Finances by Level and by State: 2010-11*. 2011 Annual Surveys of State and Local Government Finances. Available: [http://www.census.gov/govs/state/historical\\_data\\_2011.html](http://www.census.gov/govs/state/historical_data_2011.html). Accessed: March 3, 2014.
- U.S. Department of Agriculture, National Agricultural Statistics Service. 2013. *Montana 2013 Agricultural Statistics*. 2011-2012 County Estimates. Available: [http://www.nass.usda.gov/Statistics\\_by\\_State/Montana/Publications/Annual\\_Statistical\\_Bulletin/](http://www.nass.usda.gov/Statistics_by_State/Montana/Publications/Annual_Statistical_Bulletin/). Accessed: March 5, 2014.
- Wyoming Economic Analysis Division. 2011. *Wyoming Population Estimates and Forecasts*. Available: <http://eadiv.state.wy.us/pop/pop.html>. Accessed: March 12, 2014.

## 22.15.1 Personal Communications

- Big Horn County Sheriff's Office, Hardin, Montana. April 4, 2014—Phone call.
- Hardin City Hall, Hardin, Montana. April 4, 2014—Phone call.
- Miles City Police Department, Miles City, Montana. April 4, 2014—Phone call.



Powder River County Sheriff's Office, Broadus, Montana. April 4, 2014—Phone call.

Rosebud County, Forsyth, Montana. April 4, 2014—Phone call.

Taylor, Paul. Financial Specialist. Montana Office of Public Instruction, Helena, Montana. April 4, 2014—Phone call.

## 22.16 Environmental Justice

Council on Environmental Quality. 1997. *Environmental Justice. Guidance Under the National Environmental Policy Act.*

U.S. Census Bureau. 2010. *Decennial Census*. Available:  
[http://factfinder2.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml).

U.S. Census Bureau. 2012. *American Community Survey, 2008-2012 Five-Year Estimates*.  
[http://factfinder2.census.gov/faces/nav/jsf/pages/wc\\_acs.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/wc_acs.xhtml).

## 22.17 Downline Impacts

U.S. Census Bureau. 2010. *Decennial Census*. Available:  
[http://factfinder2.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml).

U.S. Census Bureau. 2012. *American Community Survey, 2008-2012 Five-Year Estimates*. Available: [http://factfinder2.census.gov/faces/nav/jsf/pages/wc\\_acs.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/wc_acs.xhtml).

U.S. Environmental Protection Agency. 2013. Where You Live Emissions: State and County Summaries. Updated March 2014. Available: <http://www.epa.gov/air/emissions/where.htm>.

## 22.18 Cumulative Impacts

Arch Coal. 2012. *Arch Coal Otter Creek Mine Permit Application*. Available:  
[http://deq.mt.gov/pubcom.mcp#Otter\\_Creek](http://deq.mt.gov/pubcom.mcp#Otter_Creek). Accessed: March 18, 2013.

Ambre Energy. 2012. *Decker Mines*. Last Revised: 2012. Available:  
<http://www.ambreenergy.com/decker-mine>. Accessed: January 19, 2014.

Bureau of Land Management. 1984. Draft Environmental Impact Statement for Round II Coal Lease Sale in the Powder River Region. U.S. Department of Interior. January.

Bureau of Land Management. 2007. *Supplemental Air Quality Analysis to the Draft Supplement To the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans*. Miles City Field Office Miles City, MT. November. Available:

- [http://www.blm.gov/pgdata/etc/medialib/blm/mt/field\\_offices/miles\\_city/seis/saqa.Par.63467.File.dat/FSEIS\\_FSAQA.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/miles_city/seis/saqa.Par.63467.File.dat/FSEIS_FSAQA.pdf). Accessed: March 5, 2013.
- Bureau of Land Management. 2013. *Miles City Field Office Draft Resource Management Plan and Environmental Impact Statement*. Available:  
[http://www.blm.gov/mt/st/en/fo/miles\\_city\\_field\\_office/rmp/draft\\_rmp.html](http://www.blm.gov/mt/st/en/fo/miles_city_field_office/rmp/draft_rmp.html). Accessed: March 14, 2013.
- Cloud Peak Energy. 2014. *Spring Creek Mine*. Last Revised: 2014. Available:  
<http://cloudpeakenergy.com/operations/spring-creek-mine/>. Accessed: January 19, 2014.
- Council on Environmental Quality. 1997. *Considering Cumulative Effects under the National Environmental Policy Act*: Available:  
<http://ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm>. Accessed: May 19, 2014.
- Matson, R. E. and J. W. Blumer. 1973. *Quality and Reserves of Strippable Coal, Selected Deposits, Southeastern Montana*. Montana Bureau of Mines and Geology. Available:  
<https://dnrc.mt.gov/Trust/MMB/OtterCreek/3Evaluations/MBMGBulletin91.pdf>.
- Montana Department of Environmental Quality. 2001a. *Air Quality Permit #1483-08*. Western Energy Company. Colstrip, MT. October 23. AFS #: 087-0004, Page 14. Available: <http://www.deq.mt.gov/airquality/ARMpermits/1483-08.pdf>. Accessed: July 14, 2014.
- Montana Department of Environmental Quality. 2001b. *Air Quality Permit #1570-06*. Western Energy Company. Colstrip, MT. October 23. AFS #: 087-0004, Available: <http://www.deq.mt.gov/airquality/ARMpermits/1570-06.pdf>. Accessed: March 10, 2015.
- Montana Department of Natural Resources and Conservation. 2013. *Montana Commercial Land for Lease*. Last Revised: December 2013. Available:  
<http://dnrc.mt.gov/Trust/Commercial/Default.asp>. Accessed: January 19, 2014.
- Montana Department of Transportation. 2012. *Tongue River Road Corridor Planning Study*. Available: <http://www.mdt.mt.gov/pubinvolve/tongueriver/>. Accessed: January 19, 2014.
- Montana State Parks and Montana Fish, Wildlife, and Parks. 2012. *Tongue River Reservoir State Park Proposed Improvement Draft Environmental Assessment MEPA, NEPA, MCA 23-1-110 CHECKLIST*. Available:  
<http://fwp.mt.gov/news/publicNotices/environmentalAssessments/developmentImprovementsAndEnhancements/default.html>. Accessed: March 18, 2013.
- National Highway Transportation Safety Administration. 2012. Corporate Average Fuel Economy Standards: Passenger Cars and Light Trucks, Model Years 2017-2025 Final Environmental Impact Statement. National Highway Traffic Safety Administration. Docket No. NHTSA-2011-0056.

U.S. Forest Service. 2011. *Beaver Creek Landscape Management Project Record of Decision*. Available: [http://www.fs.fed.us/nepa/nepa\\_project\\_exp.php?project=31892](http://www.fs.fed.us/nepa/nepa_project_exp.php?project=31892). Accessed: March 11, 2013.

Westmoreland Coal Company. 2014. *Rosebud Mine*. Last Revised: 2014. Available: <http://westmoreland.com/location/rosebud-mine-montana/>. Accessed: January 19, 2014.

## 22.18.1 Personal Communications

Landers, Dalice. Realty Specialist. Bureau of Land Management, Miles City Field Office. February 12, 2015—phone conversation.

## 22.19 Mitigation

Avian Power Line Interaction Committee and U.S. Fish and Wildlife Service. 2005. *Avian Protection Plan Guidelines*. Updated 2012.

Montana's Greater Sage-Grouse Habitat Conservation Advisory Council. 2014. *Greater Sage-Grouse Habitat Conservation Strategy*. Available: [http://governor.mt.gov/Portals/16/docs/GRSG%20strategy%2029Jan\\_final.pdf](http://governor.mt.gov/Portals/16/docs/GRSG%20strategy%2029Jan_final.pdf). Accessed: August 22, 2014.

U.S. Army Corps of Engineers. 2013. *Montana Stream Mitigation Procedure*. Available: <http://www.nwo.usace.army.mil/Portals/23/docs/regulatory/MT/Mitigation/MTSMP-Revised-February%202013.pdf>. Accessed: August 22, 2014.

## 22.20 Short-Term Uses versus Long-Term Productivity of the Environment

No references.

## 22.21 Irreversible and Irretrievable Commitment of Resources

No references.